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NATURE NOTES,

THE SELBORNE SOCIETY'S MAGAZINE

EDITED BY

JAMES BRITTEN, F.L.S.,

OF THE BRITISH MUSEUM.

—

He prayeth best who loveth best
All things both great and small;
For the dear God who loveth us,
He made and loveth all.

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Nature Notes:

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THE VICTORIA EMBANKMENT GARDENS.

SOME months ago we spoke about the extremely unsatisfactory manner in which the London County Council was discharging its duties to the public in the management of the Embankment Gardens. The constant pressure on our space, and a willingness, which we hope our contributors appreciate, to allow others to speak rather than ourselves, have hitherto prevented our recurring to the subject, which is no less important than the need of reform is urgent.

We are, however, glad to see that one of our most important horticultural papers is taking up the matter. In the *Gardeners' Chronicle* for December 14, we find the following paragraph:—"The 'laying-out' of the enclosure east of Charing Cross Station has been unsatisfactory from the first. The recent erection of the band-stand made things worse—the dotting of some miserable Euonymus on the green lawns seemed to show how little the planter valued the effect of space and 'repose' afforded by the turf; and now, quite recently, some flower-beds of the most extraordinary and meaningless pattern have been carved out. There is plenty of time to alter these, and perhaps something may yet be done to improve the general disposition of the lawns and render them appropriate to the outlines of the enclosure."

These remarks are a satisfactory indication that the matter is attracting attention in the right quarter, but they show a very imperfect appreciation of the shortcomings of the London County Council. Whether "Progressives" or "Moderates" predominate in the body, we—speaking as Selbornians—care little; we may, indeed, well say "A plague o' both your houses," for neither seems to think it worth while to take any action in the

direction of an intelligent administration of this important public work. To duke and democrat the subject is apparently indifferent; though it is certain that neither would allow for a moment in their own gardens, whether large or small, a state of things which they contentedly tolerate in the gardens belonging to the public, of which they are for the time being trustees.

The Gardens during last year have been fully as unsatisfactory as they were when we last called attention to them. The shrubs are crowded, badly grown, and uninteresting; the beds have been ill-kept, and the plants in them often unsuitable, *e.g.*, the Indian pinks, and the portulacas which, brilliant enough in bright sunshine, are at all other times dull and colourless. But it is in the borders which encircle the grounds that incapacity is most manifest. Weedy annuals, and others effective only in mass, have been dotted about as "single spies." not "in battalions;" and at a period when "herbaceous" gardening has almost become a craze, we find no recognition of its value—hardly, indeed, any indication of its existence.

To particularize somewhat: the various handsome smaller sunflowers, with which private gardens have been aglow from summer to late autumn, have been represented only by the coarse and ugly double form of one of them—the worst of its race. The tall white "marguerites," as the shrubby pyrethrums are called, have been almost entirely absent; the hardy lilies have been ill represented; of the beautiful Japanese anemones, pink and white (more especially the latter), which, once planted, increase with almost weed-like rapidity, and are invaluable in spaces such as the Embankment Gardens offer, we could not find a single example. Chrysanthemums again, which carry us on with varied colour late into November, are almost unknown; the few there are being of the commonest and poorest kinds. It would be easy to multiply examples, but these will suffice to show the need that exists for reform. Even so simple a matter as the renewing, when necessary, of the ivy which surrounds the borders is not attended to; there was a large blank patch in the end border by the National Liberal Club, which was left unfilled for months.

If it be urged that the question is one of expense, that objection can readily be answered. It is not a matter of money, but of intelligence. All the plants we have named are exceedingly cheap; the money spent in digging holes in the lawns and sticking in wretched little euonymuses, of which there are already far too many, would suffice to stock the gardens throughout. This preposterous piece of folly, by the way, has lately been carried out also in Kennington Park—where there is some excellent bedding to be seen near the gates facing Kennington Road—with the result that the once restful sweeps of grass now present the appearance of a badly planted nursery ground.

We have something to say on the kindred subject of London trees, but this must be deferred for the present. The Selbornian

who is compelled to find his *rus in urbe* has a right to complain when public duties so largely affecting his enjoyment are badly performed or conspicuously neglected; and there is no French provincial town which would not feel itself disgraced, were its public gardens to present the appearance of some of those under the management of the London County Council.

THE EDITOR.

MIGRATION AS OBSERVED IN HELIGOLAND.

MR. GÄTKE's ornithological observations during fifty years give the most interesting results in information as to the direction taken by birds in their migration flights, and facts relating to the altitude and velocity of these flights. The chapter on the "Course of Migration," with which we have already dealt,* is followed by one on the "Direction of the Migration Flight." The author reminds us that the regions of Central, Northern and Eastern Asia, comprising vast tracts of uncultivated country, stretching away to Kamskhatka and the Sea of Ochotsk, are the breeding places of the world. The migratory flocks as observed in Heligoland are infinitely greater in autumn than in spring; this is accounted for by the fact that many birds fly direct from their winter quarters to their nesting places, and in autumn, the tendency is to fly westwards, striking south later. A glance at the map will show what is explained in the book by a diagram, viz., that in autumn the birds from Southern Siberia fly westwards, passing over Asia and part of Europe before reaching Heligoland, England, or Ireland, and then they strike south for North Africa. In spring, a spirit of restless haste possesses these travellers, and they fly direct for Siberia (literally as the crow flies), leaving the British Isles and Heligoland to the north. By some this journey is accomplished in one flight. Richard's pipit is often seen in Heligoland in autumn, but seldom in spring, only when some birds have wintered in England or Ireland. The home of this bird is more remote than that of any other. It crosses great rivers in its flight from distant Daüria to Western Europe, thus demolishing the theory that birds follow the courses of rivers

As regards the altitude attained in the migration flights, Mr. Gätke confesses that in the case of a great number of birds, the elevation is too great to be within the power of human observation. It is proved that birds can live at a height at which neither man nor other warm-blooded creature can sustain life

* See NATURE NOTES for September, pp. 166-170.

for any length of time; and the account of the storing of air in air-sacs connected with the lungs is given, the volume of the bird being thus increased, while its specific weight is decreased. Humboldt, when travelling in the Andes, observed the height attained by a condor. Mr. Gätke calculated that from the distance at which it is possible to see a flag, the breadth of the condor's wings, this bird must have reached a height of at least 40,000 feet above the sea level.

The velocity of the migration flights is even more wonderful, and, as the author remarks, with the arrival of the migratory period the whole bird nature is changed. They fly to unknown lands, the young ones going first, with no guide but instinct, at heights hitherto unattained, flying through the dark night at a speed undreamed of, and unequalled even by the great railway lines of England and Scotland. Sluggish flyers, such as hooded crows, reach a rate of 108 geographical miles an hour. The northern blue-throat, in fine weather, accomplishes a flight of 1,600 geographical miles, viz., from Egypt to Heligoland in one spring night. Young birds of Richard's pipit, in fine seasons, reach Heligoland early in September, about two months after leaving the shell; the distance from Daüria (their breeding place) to Heligoland is about 4,000 geographical miles. Another writer has suggested that their flight reaches 32 geographical miles a day; if so, they would not reach Heligoland until late in December instead of early in September. All these observations strengthen the conviction that birds have reserve forces brought into use for migration. Mr. Gätke gives conclusive evidence that the young take flight first, with no guidance from the older birds. The old male birds are the last to migrate, and the first to re-appear in early spring; the author asks, "What guides birds during their migration?" He suggests that the instinct is akin to that which leads a dog home by direct, unknown roads. He follows in imagination the flight of a young warbler from Norway, within the confines of the Arctic circle. Knowing the time is come, the young bird takes flight one evening at the time he would usually go to rest; all landmarks vanish; the little wanderer soars in the darkening sky till the blackness of night is round him, earth no longer visible, but on he speeds. At dawn he rests in Germany and feeds; at evening he resumes his flight, crossing the Alps, and resting again by the Mediterranean; again he starts at evening, nor rests again till he finds himself at his goal amongst the palm groves of Northern Africa. Yet more marvellous are the flights of birds from Southern Siberia. Mr. Gätke confesses his ignorance as to the causes of migration. Why should birds leave Northern Africa, where food is abundant and sunshine brightest?

The book of nature leaves many questions unanswered, even to her most faithful students, and after his fifty years' study of migration the author sums up the matter thus:—"The life of man is too short for the complete exploration of this inexhaus-

tible field, and one can only regret that one is unable to start afresh with observations and inquiries from the standpoint which one has reached at its close." A somewhat technical chapter on "colour changes without moulting" is included in this work, and a complete list of all the birds which have been noticed in Heligoland, numbering upwards of three hundred and ninety varieties.

We wish it were possible for these travellers of the air, who out-do the proudest human achievements as regards speed, to rest and proceed unmolested on their way by nets, snares or guns. For purposes of science some slaughter may be necessary, but we would it might stop there, and at least the song-birds be spared. This, to Selbornians especially, is the one blemish of this otherwise deeply interesting book. When we read of the vast migration columns of hooded crows, and great flocks of other birds of prey, one wonders, with Mr. Gätke, that any of our small birds remain.

HELEN J. ORMEROD.

EARTH AND SHINGLE SLIPS.

SOME time ago articles of mine, dealing with the changes in flower life and bird life consequent on the settlement of New Zealand, appeared in NATURE NOTES. These were comparatively superficial alterations, and I think it may be of interest now to consider the more radical and profound changes produced by slips on the face of nature.

First of all, let us dwell briefly on the shingle slips of the South Island. The backbone of that part of the colony is cut up into sheep stations, usually many thousand acres in extent. The mountains average five or six thousand feet, the loftiest peaks attaining a very much greater elevation. These high lands are stocked with the wild and active merino sheep. Generally the larger runs on these our Southern Alps are fenced into two divisions—the "summer country" and the "winter country." The "summer country," highest and most exposed, is where the stock can run safely during the snowless summer months; the "winter country," where the sheep are carried during the colder portion of the year, is the lower and more sheltered portion of the run. In each case the division has accentuated these original differences.

The "winter country" has greatly increased in value, for year after year imported grasses and clovers have sown themselves, the hill tops have been heavily manured, and year by year the sward has become denser.

In the "summer country" more profound alterations have taken place. There the sheep have year after year cropped the sward bare, eating out in early summer, the season of blossom and seed, the sweet alpine plants and high hill annual grasses. Naturally, the turf has got more and more thin, and the shingle beneath less firmly fixed and more ready to break out.

Finally comes a season, abnormally windy and dry; the feed is barer than usual, the stock more restless. Their constant rambling wears away the thin layer of soil, a stone is displaced, the hole grows larger and larger as the fierce north-west gales blow out the dust and lighter pebbles. At length an incipient slip appears on the mountain side, and once begun, the touch of each sheep's hoof, the breath of each gale, the brief torrent of each flood, adds to its size and length. The large quantity of gravel borne to the sea is of great moment to the whole of New Zealand, affecting as it does the height of the river beds, the coast line, and the amount of shingle drifted by the prevailing ocean currents into the various breakwaters of the colony.

Landslips in the North Island are of an entirely different character. They occur from other causes than the shingle slips of the south, and in different ways. Even before the introduction of alien herbage there is evidence that landslips took place. Now, however, that the roots of the old vegetation—forest and fern—are gone, the frequency of slips is almost incredible. After heavy rain, indeed, looking from a distance at the hills, they appear to have been weeping clay.

Broadly speaking, these earth avalanches may be classed in two groups—earth-slides and earth-slips; and again, speaking generally, it may be said that through their agency, the lands for one hundred and fifty miles along the east coast are moving slowly seaward, flattening out, as it were—the edges of the upper crust being swallowed by the sea or eaten away by the rivers.

The four great factors in this movement are the extreme steepness of the hills, the nature of the rock—a soft clay easily disintegrated—the shallow roots of the new vegetation, and lastly, the almost tropical violence of the rains. My rain gauge registered on one occasion last year over seven inches in the twenty-four hours; on another, in about ten hours four and a half inches fell.

The earth-slides are movements of the larger character. They can be detected by trees slightly out of the natural angle, the bulging of fence lines, the bursting of gate fastenings, and, occasionally, the blotting out of a hill road. The slide usually narrows to a broadly ovoid shape at the top, where a crack of eight, ten, or twelve inches also attests the movement. An earth-slide does practically little damage, and in very many cases the movement does not seem to be regularly continuous.

The earth slips, however, do great harm, for though the displacement of earth is less, the motion is much more violent.

Fences are buried, silted up, or carried away for chains. Then, too, the earth slip is a fatal trap for sheep. Often for scores of yards down a hillside a bed of sticky and tenacious puddled clay will be for weeks a terror to the shepherds. On a run near here, fifty sheep were found bogged in one hole; and during a bad season the loss of sheep in landslips cannot be set down as less than many thousands.

Landslips occur in various forms. Sometimes the side of a hill is deeply gouged out and scattered in fan shape over the turf below; sometimes only a narrow ribbon of clay mars the slope. Upon my own place it is interesting to watch another and important local cause for landslips, and to note, too, that what has been going forward for years before Europeans saw the island, is still in progress. Over great areas in the North Island, pumice grit has at one time or another been deposited, sometimes so thickly as to sterilize the land, in other parts only a few inches deep. About our district a very thin layer has been left. It is still to be found resting in every depression, however slight, upon the fertile marl. Above that pumice vein there is a more modern soil of leaf mould and clay dust, held together by a dense matting of roots. Rain water, filtering through the top soil and reaching the stiff marl, follows the pumice vein, and gradually the grit becomes the regular channel by which superfluous water escapes.

The next step is the slow enlargement of this tiny water-course. The intermediate layer of pumice is gradually washed out and the top crust caves and falls in. It is then large enough to be avoided by shepherds as a dangerous "under-runner." The small semi-subterranean stream grows by every flood, the bottom guts out, the sides slip in, and out of what was once a gentle depression in the hills grows a steep ravine.

Some idea of the quantity of soil that slips after a heavy flood may be gathered from the fact that upon one occasion no less than eighty-four slips were counted on less than three-quarters of a mile of hill slope. From that particular ridge I daresay fifteen per cent of the surface land had gone. Such a percentage is of course unusual, but it seems certain that the present tendency of the country to slip will continue, and that hereabouts, at least, our hills will never exhibit the unbroken stretches of green so characteristic of Britain.

H. Guthrie-Smith.

AUTUMN LEAVES IN 1895.

IN some respects this autumn has been a remarkable one in our part of the country, owing chiefly to the abnormal growth of certain plants and the absence of vivid colouring in some of the autumn leaves.

The severity of frost we experienced in the early spring nearly killed my plants of *Gunnera scabra*, so, in order to fill up vacant spaces in the bed, about a dozen young hemp-seedlings were inserted in May last.

These developed into grand specimens, measuring fully thirteen feet in height, with strong woody stems which in due time were crowned with masses of well ripened seed. A very pretty scene could always be witnessed by standing still for a few moments near this bed. Crowds of chaffinches, blue tits, coletits, and greater tits hung upon every plant, shelling out the hemp-seeds, twittering, quarrelling, flitting backwards and forwards, evidently enjoying "a real good time" whilst the provender lasted.

The Jerusalem artichoke was another plant which responded to the unusual amount of sunshine we were favoured with during this past summer. It flowered freely, and attained the height of thirteen or fourteen feet. A pomegranate growing against my house wall presented us with some brilliant scarlet flowers, and its leafage faded away into lovely tints of brown and red. Owing, I imagine, to the remarkable alternations of temperature we have had during the autumn months, and ten degrees of frost coming suddenly in the last week of October, I have observed that many trees have dropped their leaves whilst they were perfectly green. This has been the case with individual trees of horse-chestnut, mountain ash, maple and sycamore, which are usually vivid yellow or orange.

The Salisburia leaves are generally of the brightest gold colour when they fall from the tree, but they have no warm colouring this year, and only form a purplish green carpet beneath the tree. The Catalpa is also colourless, but the tulip tree, instead of being golden yellow as usual, has put on an additional orange red on the outer branches. Those who are learned on the subject will no doubt be able to explain to what atmospheric causes these variations are due.

Such observations as these greatly enliven our daily walks, and by the comparison of our personal notes with those taken by observers residing in other parts of England, we may arrive at some of the mysterious laws which govern the colouration of leaves.

Great Stanmore, Middlesex. ELIZA BRIGHTWEN.

FOOTPATHS AND COMMONS.*

THOSE who have done battle for so many years in the cause of footpaths and open spaces can have but one feeling—that of hopefulness and thorough satisfaction—as they peruse the pages of Sir Robert Hunter's very complete summary of the principles of law which now "govern the preservation of footpaths, roadside wastes, commons, and village greens." It is less than two years ago since we brought before the readers of NATURE NOTES the history of the struggle to win back open spaces that were well-nigh lost and to maintain those that still remained, so graphically described in Mr. Shaw Lefevre's work *English Commons and Forests;* and since the publication of his narrative the machinery of the law for their preservation has been at once strengthened and simplified by the provisions of the Local Government Act of 1894.

Hitherto the burden of preventing obstruction of footpaths and encroachments on commons has laid largely on public-spirited individuals, but now the lately-created Parish and District Councils are practically made responsible for keeping open paths to the public and for putting a stop to enclosure of common land.

All our readers will agree that, second to the enjoyment of open spaces, there is no more valuable heritage than the vast network of footpaths that overspreads our land. High roads and lanes alone, which are often bordered by walls and hedges shutting out the view, cannot give us a true idea of the beauties of the landscape, but footpaths lead us to the inmost shrines of the temple of nature. Once existing, they can only be destroyed by an Act of Parliament or by an order of Justices enrolled in Quarter Sessions. The latter can now only be obtained by the consent of the District and Parish Councils, and against this order a single individual has it in his power to appeal. But footpaths are in far more danger from obstruction by selfish owners of property, and, in instituting legal proceedings, it must be proved that the path was originally dedicated by the landowner (not a lessee or tenant) to the public, or that the "user" of the footpath has extended over a given number of years. Here, however, the duty of proceeding against unlawful obstruction is incumbent on the District Council, or, if it fail, the County Council. Both the District and Parish Councils are likewise bound to keep footpaths in repair.

Passing over the question of our pleasant and pleasure-giving roadside wastes, so many of which have been lost through the erroneous old notion that the public right of way extended to only fifteen feet from the road-centre, we will only say that they

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* *Footpaths and Commons, and Parish and District Councils*, by Sir Robert Hunter, M.A. (Cassell & Co., 1895, 8vo, pp. 32.) Price 6d.

will fare better under the new arrangement, and proceed to take a brief survey of the all-important section dealing with commons and open spaces.

The numerous inclosures of commons or parts of them, hitherto so frequent, by lords of the manor under the Statute of Merton and that of Westminster the Second, will now become illegal, if it can be proved that common rights are in existence. Upon the burden of their proof, however, lies the safety of our open spaces, and if this proof is not forthcoming encroachments and inclosures similar to those narrated in *English Commons and Forests* cannot be resisted. But among the framers of the Local Government Act of 1894 there were ardent friends of the open spaces movement who foresaw this contingency. They consequently provided that all District Councils, urban and rural, should have the power to purchase common rights, or lands or houses having common rights annexed thereto, and that Parish Councils might acquire the same by gift though not by purchase. Once obtained, these rights may be defended and inclosures prevented. Inclosure by provisional order of the Board of Agriculture, in which all persons legally interested obtain a portion of the common, certain allotments being set out for public purposes, can now only be permitted by a special Act confirming the provisional order. Before the Board can make this provisional order a local inquiry must be held, and should the order eventually be granted, large compensation must be made in the way of allotments and recreation grounds. Railway companies in future must apply to Parliament for power to appropriate common land. They must advertise their intention publicly in the month of November, and by the end of the month deposit plans of the course of the line to be made, and of the common land intended to be taken, with the Clerk of the Peace of each county affected. In the following month (December) a copy of their Bill must be deposited in Parliament. This Bill, though a private one, must be read a second time during the session, just as if it were a public Bill.

The regulation of commons, which provides for their protection from injury and disfigurement, is now mainly in the hands of the London County Council, so far as metropolitan commons within the County of London are concerned. Those outside the County of London, and in the provinces generally, are now to be controlled, subject to certain conditions, by Urban and Rural District Councils. Mr. Shaw-Lefevre, in his work above-mentioned, gave rather a large list of commons and other open spaces, situate in what is known as the Extra-Metropolitan District, that were not included in any scheme of regulation under the Commons Act of 1876. It is satisfactory to know that henceforth they will be provided for, so that encroachments like those that took place on Hayes Common, in Kent, not such a long time back, will now become impossible.

Village greens will in future belong to the Parish Council;

and the same body will now have power to acquire, in many parishes, open spaces that have been reckoned as village greens, though not held as such by any parish authority.

In pleading the cause of open spaces in these pages we have often called attention to their value in the neighbourhood of large towns as conducing to the health of the inhabitants, more especially of those dwelling in the crowded parts. But the preservation, in rural districts, of footpaths, of commons, and of village greens, is of equal importance, as the author of the pamphlet under review emphasizes. The causes of migration of country-dwellers into towns are doubtless complex, and could not properly be discussed here, but unquestionably villagers love their birth-place none the better for the common being enclosed and the footpath stopped up. It is our earnest hope, therefore, that the newer and happier order of things may serve to check the hitherto ever-increasing exodus from the country-side.

ARCHIBALD CLARKE.

AN EARNEST APPEAL.

THE Council wish to take the opportunity of the beginning of a new volume of NATURE NOTES to impress upon each member of the Selborne Society the importance of making an effort to extend the work of the Society. The good that has been done should be an encouragement to increase our efforts rather than an excuse for relaxing them. Many flowers and birds, once plentiful, are becoming scarcer every year; some of the most beautiful spots in our lands have been attacked by that vandalism which feeds on selfishness; millions of birds, both common and rare, are killed annually for millinery decorations, and there are wrongs and cruelties inflicted on innocent and helpless creatures which can but sadden the thoughtful.

It is the province of the Selborne Society to endeavour to lessen these evils, and whilst any remain, it has work to do. But its efforts in this direction must be practically futile if it is left to the few to make them. There should be no lukewarm members of the Selborne Society. Its objects are such that none can plead inability to assist. All cannot, of course, have equal opportunities, but all can foster and endeavour to spread the same keen sympathy with the beauties of nature and the life beneath us, and make known the existence and objects of our Society. The importance of adding to the number of members should not be overlooked, and if each member would obtain at least one recruit at the commencement of our new year, the actual doubling of our members would be only one of the benefits that would arise. The hands of the Council would be

strengthened, the finances would be placed in a condition to enable the Society to take action where now it is compelled to remain inactive. Each new member becomes a centre from which may spring incalculable good to the objects we have at heart.

The evils we are combating are so great and widely spread, that they can only be lessened by determined and continuous efforts; and the Council make a special appeal both to Branches and individual members to work with increased energy during the coming year.

PERIPATUS AND OTHERS.*

THE first issued volume of the Cambridge Natural History, treating of the Mollusca and Brachiopods, has been followed at no long interval by a second, which deals with the animals mentioned in the title cited below.

It may be presumed that all readers of NATURE NOTES know what an insect is. Most are also probably aware that the creatures termed Myriapods are those that in ordinary parlance are called centipedes and millipedes, but we venture to think that many of those who read the title of the volume now under notice will at once exclaim: "But what is *Peripatus?*" And unfortunately this question, like so many others, is much more easily asked than answered: for *Peripatus* is *Peripatus* and nothing else. It has no vernacular name by which it may be known, and it possesses the high distinction of occupying an entire class all to itself, with no near neighbours but the worms on one side and the centipedes on the other, both of these being at a very considerable distance. In appearance it is something like a cross between a caterpillar and a slug, and when it was first discovered in the West Indies in 1826, the naturalist who described and figured it took it for a peculiar kind of legged mollusc. It is, however, as Prof. Mosely pointed out, a primitive but most important member of the Arthropoda, the chief interest in its structure lying in the fact that in some respects it serves to bridge over the interval that separates the centipede-like arthropods from the higher worms.

The centipedes and millipedes, which form the second chapter of the volume, are also sometimes known in this country as "forty legs" and "wire-worms." But although Mr. Sinclair has grouped the two together in one class, they in reality form two very distinct divisions of this rank, and are not by any means nearly allied. The centipedes are soft, flattish, carnivorous, mostly very active animals, which have a single pair of legs upon each segment of the body and a pair of powerful poison jaws behind the head. The millipedes, on the contrary, are sluggish vegetarians, with hard cylindrical bodies and two pairs of legs to most of the segments. They have, moreover, no poison jaws, but are protected from enemies by the secretion of a repulsive odour. They are said to be very destructive to farmers on account of their propensity for browsing upon the tender shoots of the growing crops.

The rest of the volume and by far its greater part, is devoted to some of the insects, but it is impossible to do more than just briefly allude to the orders that are described. After some introductory chapters on structure, development and general habits, Mr. Sharpe proceeds to deal with the orders. First comes the *Aptera*, containing such obscure insects as spring-tails and silver-fish. These are followed by the *Orthoptera*, which from many points of view is the most interest-

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* THE CAMBRIDGE NATURAL HISTORY: *Peripatus*, by Adam Sedgwick; *Myriapods*, by F. G. Sinclair; *Insects*, part 1, by David Sharp. (London: Macmillan, 8vo, pp. 584; 371 cuts, coloured map.) Price 17s. net.

ing of all the class. It includes such familiar kinds as earwigs, cockroaches, grasshoppers, locusts, leaf-and-stick insects, and the like. Then comes the *Neuroptera*, an order comprising the dragon-flies, white ants, and May-flies. Under this heading there is a special chapter devoted to an admirable account of the social economy of the white ants, which is most interesting and has never before, we believe, been published in England in a concise and comprehensive form. The order *Hymenoptera*—sawflies, ants, bees, &c.—is only partially dealt with, the rest of it being allowed to stand over for another volume, which will be entirely set apart for the remaining groups of insects.

After this brief sketch of the contents of the volume, and the nature of the animals discussed in it, we are compelled to face the very important question—Is it well done? To this we reply most emphatically in the affirmative, so far as the insects are concerned. We doubt if they could have been done better by any one man; and when the following volume is completed, Mr. Sharp's work will, we think, last for many years as the standard text book on entomology in England. Of course there are some points in it open to criticism, and we should like to hear Mr. M'Lachlan's opinion respecting the heterogeneous mob grouped under the heading *Neuroptera*. But on the whole the work is worthy of all praise, and affords a striking contrast to that of the two authors who deal with *Peripatus* and the Myriapods. Mr. Sedgwick's chapter is clumsily written, and far too technical for beginners; his synopsis of the species is inexcusably imperfect, quite apart from its manifest sins against the rules of scientific nomenclature. Mr. Sinclair's contribution is much more readable; but his classification of Myriapods—well, when we affirm that it is for some unexplained reason half a century old, and full of mistakes as to matters of fact, we need say no more to prove its utter worthlessness as an epitome of our knowledge on the subject.

We have no wish to conclude with a disparaging note, so we will add that the book is admirably printed, and that the woodcuts are in every way excellent.

BRITISH BIRDS.*

THIS is a popular book, and treats in a popular manner of all the species that reside permanently, or for a portion of each year, within the limits of the British Islands. The accidental, irregular, or occasional visitors are mentioned but are not described. Of the rest there is, under the heading of each species, a very concise description of the plumage, and a brief account of the appearance, language, and life habits of the birds treated of. The *raison d'être* of this book appears to be the necessity of having a volume on British birds in Messrs. Longman's "Outdoor World Library." Whether this justifies its appearance—at a time, too, when a handbook, more full and complete than the present work, yet still designed for popular use, and prepared by a master in the science, is in course of publication—is another matter. But while we confess our inability to see what place or want the volume under notice can fill, we took it up with considerable pleasure and interest. It is always pleasant, and generally instructive, to read what a

* *British Birds.* By W. H. Hudson, C.M.Z.S., with a chapter on "Structure and Classification," by Frank Beddard, F.R.S., pp. xviii., 363; 8 coloured plates, 8 plates, and 103 figures. (London: Longmans, 1895.) Price 12s. 6d.

foreigner has to say about our familiar birds, and Mr. Hudson must forgive us for saying that he is, in a sense, somewhat of a foreigner; that is to say, he learnt his birds, and his grammar of field ornithology, among the avifauna of another and a distant country. During eight months' residence in South America, spent in studying the ways of the birds which were Mr. Hudson's early friends in an adjacent republic, we learnt to value and appreciate the graphic and accurate accounts he has written of the "Birds of the Argentine Republic;" and this makes us regret the more that he has not had greater opportunities of studying the birds of this country. We cannot but feel, as we turn over the pages of the present volume, that he has been obliged to compile rather largely. This he has, it is true, done with discrimination. The life-histories appear, on the whole, to be faithful as well as pleasant pictures of our bird life, though here and there we are inclined to take exception to some of his statements. For instance, it is not quite correct to class the song thrush as a summer migrant of the same standing as the ring ouzel (p. 39), for, given a mild season, plenty of song thrushes may be heard singing about Christmas. Neither do we think it is quite correct to say that the missel thrush is loudest (in song) in wet and rough weather. Although a little stormy weather does not easily silence him, yet we think he sings best on a warm, still, winter's day—one of those days, too warm and genial for the season, which in some parts of the country are called by the expressive name of "weather-breeders," because they are so often followed closely by a return of the rigours of winter. In this way, probably, the idea that the stormcock's song *foreboded* stormy weather sprang up. We should like to know what evidence there is to support the statement that this bird rears two or *three* broods in the season. The missel thrush is one of the earliest birds to gather in flocks in summer. To say that the pied flycatcher is, in its nesting and feeding habits, and its partiality for orchards and gardens, like the spotted flycatcher, is misleading, for it differs somewhat on all these points. The "other song" of the wood wren (p. 78) is, we imagine, the call-note of the male, which is different to that of the female. A few more things of this kind might be pointed out, but on the whole the young naturalist will find very little that is inaccurate, and very much which will yield him pleasure and profit, in the perusal of these pages. A notable point of the book is Mr. Beddard's valuable essay on the anatomy and classification of birds, which the young (as well as the old) ornithologist should read carefully, undismayed by certain tough words he will encounter.

The illustrations alone are worth more than the price of the book. What would the young ornithologist have given for them twenty years ago! The eight coloured plates by Mr. Thorburn are a treat to look at, but we call especial attention to the eight plates in black and white by Mr. Lodge—pictures of bird-life,

each representing several species given to herding together. The idea may not be quite new, but it is, if we mistake not, new to histories of British birds. The scenes are all pleasing, especially

COMMON TERN (⅓ nat. size).

the two last. Of the illustrations in the text, also by Mr. Lodge —of which, by the kindness of the publishers, we are able to give two specimens—while they are excellent as a whole, and many

WIGEON (⅓ nat. size).

of them are perfect gems, we wish to call attention to what we think is a matter for regret. It seems to us that in some few—among the Passeres—too great attention to artistic effect has led to the loss of the individuality and character of the species figured.

O. V. A.

BRITISH BUTTERFLIES AND MOTHS.*

As long ago as the spring of 1856, the late H. T. Stainton commenced the publication of his *Manual of British Butterflies and Moths*, in threepenny monthly numbers. It was chiefly addressed to schoolboys, and the author boldly printed ten thousand copies. This has remained the only available handbook of British Lepidoptera up to the present time; not only on account of its great merits, but because it has been the only book to which entomologists could turn for a compendium of the smaller moths, to which Stainton always devoted his chief attention, but which are usually passed over in the numerous popular books on British butterflies and moths. Much has been done since Stainton's *Manual;* but although we have lately had a plethora of popular books, a students' manual, brought down to the present time, and written rather for advanced students than for beginners, was still a desideratum, and this, Mr. Meyrick has now endeavoured to supply.

Late autumn is a dead time of the year for entomologists, and we are rather surprised that Mr. Meyrick did not hold over his book till spring, when butterfly collectors, like the butterflies themselves, emerge from their winter quarters with renewed energy. But he probably thinks that his book will afford his readers enough hard reading through the winter to console them during the slack time of their entomological labours.

To the advanced student Mr. Meyrick's book will commend itself by its compact and business-like form, its carefully drawn-up characters of genera and species, its elaborate tables, and the utter absence of all "padding." "The young collector" will seek in vain for any information on collecting or preserving, or even any detailed observations as to habits and localities. Occasionally we read of a species being found "in gardens" or "in woods," but even in the case of such insects as the British species of *Procris*, we read only:—"*P. geryon*, Hb. . . . England, local; C. and S.W. Europe; Asia Minor to Turkestan, 5, 6." "*P. Statices*, L. . . . Britain to the Clyde; Ireland, rather local; (infrequent in Scotland); Europe, Asia Minor to N. Persia, 6;" "*P. globulariæ*, Hb., Kent to Gloucester, local; C. and S. Europe; Asia Minor, 6." Surely, in the case of such local species, some more definite information both as to localities, and to the kind of soil, &c., preferred by the insects, would have been desirable. It is true that enough and to spare of such information may be gleaned from popular books; but it seems a pity, even in the most compressed scientific manual, to ignore the requirements of the field naturalist altogether. After all, much useful information may be obtained by field observations, even though it may be infinitely more interesting to strip the scales off the wings in order to ascertain, by comparing the arrangement of the wing veins, how one family of butterflies and moths originated by evolution from another.

The first thing that will strike any entomologist on opening the book, is the revolutionary classification, which will, no doubt, largely contribute to its usefulness, as it will give everyone who uses it a valuable training in the use of the excellent index at the end. We need not say much of this, for it will, no doubt, be thoroughly discussed in more strictly entomological journals, but we certainly think that the butterflies are so distinct a group that they cannot be appropriately placed anywhere, except at the beginning, in any section of classification (or, if we reverse the arrangement, at the end) of the moths. Nevertheless, Mr. Meyrick puts them in the very middle of the Lepidoptera, though the sequence of families is left nearly as usual, beginning with the *Nymphalidæ* (including *Anosia*) and *Satyridæ* and ending with the *Hesperiadæ*. They are, however, preceded by the *Lasiocampidæ*, and followed by the *Phycitidæ*. So far as we are aware the only other entomologist who has adopted a similar classification is Zebrawski, who in his catalogue of the Lepidoptera of Cracow, places the butterflies between the *Saturnidæ* and the *Geometridæ*, though in one respect he differs

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* *A Handbook of British Lepidoptera*, by Edward Meyrick, B.A., F.Z.S., F.E.S., Assistant Master at Marlborough College. (Macmillan, 1895.) Price 10s. 6d. net.

from Mr. Meyrick, for he *commenced* the butterflies with *Parnassius* and *Pieris*, and *ended* them with *Colias* and *Papilio*.

Mr. Meyrick has done much work in Australian and New Zealand *Lepidoptera*, and has always paid much attention to the neuration of the wings; a subject which might be more attended to by British entomologists than has hitherto been the case, though it is easy to attach an exaggerated importance to any one character. The occasional illustrations of wing-neuration which Mr. Meyrick has given will be very useful, if only in familiarizing British Lepidopterists with the use of so important a character. Although the book is rather more technical than some of the readers of NATURE NOTES may care for, it will yet be of sufficient importance to any field naturalist who will take the trouble to master its technicalities to justify our giving it a detailed notice here; for, as we have said before, there is no other book, except Stainton's *Manual*, which even attempts to give an adequate *résumé* of the whole of the British Lepidoptera; and though we may not agree with Mr. Meyrick in everything, yet it is always useful to have the conservative tendencies which frequently manifest themselves in British entomologists, stirred up now and then by some bold innovator. W. F. K.

SELBORNIANA.

Gilbert White's Selborne Sermons.—A well-known bookseller recently catalogues a copy of the first edition of the *Natural History and Antiquities of Selborne*, 1789, which he prices at £5 18s. The information is vouchsafed that only one other copy has been offered for sale at auction for the past three years, and that (the Crowther copy) realised £10. His list also contains five original manuscript sermons in the autograph of Gilbert White with the following note:—"At the death of Gilbert White these MS. sermons (with the original MS. of the *Natural History of Selborne*) passed into the hands of his brother Benjamin, from him to his son Benjamin, from the latter to his son, the Rev. Glyd White, who bequeathed them to the father of their recent owner, after which they passed directly into our hands." These are priced from 2½ to 3 guineas each, and they appear to have been preached on an average about thirty times each.

Wormley, Herts. W. B. GERISH.

NATURAL HISTORY NOTES AND QUERIES.

Titmice and Nuts.—We have been much interested lately in observing the taste which the titmice appear to have for nuts. We have put some nuts in the crevices of the bark of an old tree, close to the house, every morning for several weeks, really for the squirrels; but it appears that the tits are more ready to take them. Almost immediately the nuts are left one or two great tits appear from some tree close by, having evidently waited expectantly. If the nuts are fixed firmly into the bark the bird begins to hammer with his beak at it, and, finally manages to make a hole in it, through which he can get out the kernel, for we have found nutshells left by them thus. They do not seem to choose the softest part of the nut, but make a hole in it anywhere. If they cannot do this, they carry the nut off from bough to bough until, I suppose, they find some place to hammer at it satisfactorily—indeed, we often hear them making quite a noise at it. Sometimes, too, they seem only to play with the nuts, picking them out, and then rolling them down to the ground, whilst others they take them away, apparently to hide them, for they return almost at once for another. Although there are two or three kinds of titmice in the garden, we have seen none but the great tits come for the nuts, but they seem to prefer them to the coco-nuts which we hang up for them.

Bristol. A. R. F.

An Intelligent Horse.—May I be allowed to mention a rather singular occurrence of some years ago, which struck me very much indeed at the time, and has ever since remained greatly impressed upon my memory. I was one day walking along a country road, when I saw a man in a waggon coming towards me; the man was lying at the bottom of the waggon somewhat affected by drink. Now he was desirous of going through a gate by the roadside which led into a ploughed field, but the gate being shut, the horse promptly stopped in front of it; the waggoner (as I have before remarked, half stupid with drink) instead of getting out to see what was the matter, begins whipping the horse with vigour, still retaining his half-recumbent position. What does the horse do? He neither kicks nor rears, but tosses his head high in the air and "whinnies" loudly until the man at last gets down and opens the gate. Note that the horse did not whinny until the man had begun to whip him unjustly; evidently the horse felt the injustice, and adopted this mode of expressing it.

Salisbury. C. R.

Birds and Windows.—A correspondent mentions (p. 213) that rooks seem to be the only birds that see through glass. My experience is that all birds which come to the window to be fed—a fair variety, but no rooks—seem to see any movement in the room only too quickly, and fly off instantly. I am always wishing they could not see through glass. Is my experience exceptional, or are the birds which come to Mr. Rooper's windows unusually tame?

Malvern. F. R.

Have Weasels Power of Fascination?—A friend on whose word I can rely told me the following. He saw a lark flying above the turnpike road fluttering some four or five feet above the ground in evident distress. As he looked he saw a weasel in the middle of the road, waiting for the bird to come down. This it did, falling helplessly close to the animal, which killed it and carried it away. Everyone knows how fear under such circumstances will paralyse a rabbit or a hare; this incident seems to show that a weasel has some fascination in its eye.

Hexham. I. E. PAGE.

Bird Notes.—While staying with my brother, Mr. Morris, in Yorkshire lately, I was told that in the garden of his Rectory (Nunburnholme, the same living that my father, the Rev. F. O. Morris, held) the green woodpecker has been seen several times—indeed my brother and sister both saw it while I was there in a tree very near the house. My brother hopes he may be honoured by its making a nest there next spring; the garden is a real paradise for birds, having plenty of trees, a stream, and perfect quiet. While on the subject of birds I may mention that when re-reading Mr. Warde Fowler's delightful *Year with the Birds* I noticed that he says, speaking of the grey wagtail, "I never but once saw it away from water." Now the only place where I feel *sure* of seeing it about here, and have seen it again and again, is in a ploughed field between four and five hundred yards from the canal. I have also seen a pair very near this house, which is several hundred yards further from the canal—probably the same pair.

Horsell Vicarage, Woking. ROSE TURLE.

Sparrow Hawk.—The following extract from a friend's letter may, perhaps, be of interest; may it not possibly point to a condition somewhat similar to that of a "rogue" amongst elephants?—"A sparrow hawk took up his nightly abode on the transome of the top light of a window in Arley Chapel in the autumn of 1890, and remained constant to that roosting-place until, at all events, May, 1892, when we left Arley. The hawk was always solitary. I never saw him with a companion. The roost was always exactly on the same stone."

Warburton Rectory, Warrington. G. EGERTON WARBURTON.

Reason in Spiders.—I recently encountered a curious illustration of the reasoning power of spiders. Standing in the road between Watford and Pinner, my attention was attracted to a small spider sitting in the middle of its web. While I was watching, a fly dashed through the web, and the spider darted

towards him in such a frantic manner that I thought he would be glad of something to eat. I accordingly procured an insect and dropped into the web. The spider instantly laid hold of it and was soon devouring it. He had scarcely got his teeth fixed in it, however, before two other spiders appeared, apparently at the top of the web. Both made a step forward, but one retired, and the other ran down upon the proprietor of the web, and in a moment drove him out of it and began to eat the prey. Scarcely had he started, however, before the other spider came down from the top of the web and began to fight with him, and the two in their struggles moved away from their prey by a slanting downward track. Perceiving this the original proprietor of the web returned and stationed himself between the combatants and the insect they were fighting about, and presently, when they were both exhausted by their conflict, darted down upon them. One immediately dropped out of the web, and the conqueror instantly seized the other. They remained in contact for some time and then dropped out of the web, the original proprietor sucking the blood of his victim. They fell close to the one that had already dropped out of the web, but this individual, apparently having done enough fighting to satisfy him, left them alone. This little incident of one spider winning by sheer strategy a complete victory over two, each of which was more than a match for him in a fair fight, seems worth putting on record.

American Cuckoo in Dorset.—I send you a note of the occurrence here of the "American yellow-billed cuckoo" (*Cuculus americanus*), a rare bird in this country, a specimen of which was picked up dead in my garden on Oct. 5. The same bird, I believe, had been observed flying about the garden during the summer. Morris (*History of British Birds*) says four examples have occurred in this country—one in Cornwall, another in Wales, and two in Ireland; while in Varrell (*History of British Birds*, 4th edition, vol. 2, revised and enlarged by Alfred Newton, 1876-1882), another in Wales in 1870, and possibly a sixth on Lundy Island in 1874, are named.

Westmead, near Bridport. WM. COLFOX.

TO CORRESPONDENTS.

J. G. T.—We are very sorry, but we simply *dare not* risk another outbreak of the excited correspondence which would ensue if we were to print your note on the sparrow!

WE must request those who favour us with their communications to observe the following rules. We cannot undertake to notice the contributions of any who fail to comply with them.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

Several book notices are unavoidably postponed until our next number.

SELBORNE SOCIETY NOTICES.

Field Club.—Notice is hereby given that a meeting of the Field Club Committee will be held on January 2 at 6.30, after the Council Meeting, to consider arrangements for the spring rambles. Honorary secretaries and representatives of branches around London are invited to attend this meeting. Suggestions from members interested in the Field Club, with regard to the rambles or the arrangements connected therewith, will be gladly received and laid before the Committee. (Miss) Edith J. Temple, Hon. Sec., Field Club.

Council and Committee Meetings.—The next meetings of the Council will be held on Thursdays, January 2 and February 6, at 5.30; of the Magazine and Leaflet Committee on Thursdays, January 16 and February 20, at 5.30; of the Finance Committee on January 16 and February 20, at 6.30.

NEWS FROM THE BRANCHES.

Junior Branches.—The Council is desirous of receiving applications for the formation of Junior Branches under the new rule passed at the special General Meeting held on November 5 (Rule XVII,A; see page 244, NATURE NOTES for December, 1895). It would appeal to the principals of colleges and schools throughout the country either to assist in their formation, or to allow existing junior natural history societies to become in this way associated with the work of the Selborne Society.

Clapton (Lower Lea Valley).—The second of the series of monthly Social Evenings was held on December 7, when a paper entitled "Domestic Entomology" was read by the Honorary Secretary, Mr. R. Marshmann Wattson. Amongst the objects which were exhibited were some living *Lepisma*,* and these excited considerable interest. Songs and recitations by members and friends completed a very enjoyable evening.

Croydon and Norwood.—The Rev. J. Wills, a Vice-president of the Branch, made an eloquent appeal at West Croydon on the evening of Sunday, December 22, on behalf of bird-life; condemning in unmeasured terms the plucking of ospreys, the killing of wild birds for the sake of their feathers, and the wanton destruction of birds' food which went on at Christmas time, when large quantities of holly were used for decorations. The sermon created an unwonted impression amongst his hearers.

Dover Junior Branch.—The Council welcomes the formation of a Junior Branch at Dover College, in accordance with the new rule. Bernard F. Hall, Esq., has kindly undertaken the post of Honorary Secretary and Treasurer of the Branch.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

* Readers interested in the subject will find further particulars in Mrs. Brightwen's new book, *Inmates of my House and Garden.*

Nature Notes:
The Selborne Society's Magazine.

No. 74. FEBRUARY, 1896. Vol. VII.

THE NEW LAUREATE.

AFTER a long period of waiting—a period, so we are led to believe, of heart-burnings and anxieties among the rival claimants to the throne left vacant by the death of Tennyson—we have once more a Poet Laureate. After Wordsworth and Tennyson, appointed for their literary merits, we have the political promotion of Mr. Alfred Austin; an appointment hailed with satisfaction, so far as we have seen, by only one organ in the press, and that, one which can hardly be credited with impartiality. But it was at any rate natural, if wanting in decorum, that a leader-writer in the *Standard* should congratulate his fellow-scribe upon the laurel crown which has been conferred upon him by the political party which has received and, we presume, profited by his services.

"Not a great poet, unquestionably not a poet of the first rank, all but unquestionably not a poet of the second rank, and probably—though no contemporary perhaps can settle that—not even at the head of poets of the third rank, among whom he must ultimately take his place." In these words, twenty-five years since, this second Alfred—whose name at once challenges a comparison, which *Punch* has not been slow to emphasize, with his great predecessor—published his estimate of Tennyson. If that estimate were accurate, and if Alfred Tennyson ranks among the third-rate poets, where shall we place the present Laureate? It must not, moreover, be forgotten, that many see in Mr. Austin's verse an echo or faint reproduction of Tennyson—thus one of his critics writes:—

> [I] find in you the 'Tennysonian note,'
> Diluted, small, occasionally lame,
> But very good—for a suburban throat.

Selbornians, however, have less cause for dissatisfaction than others, for in the new Laureate they have one who, in prose and verse, has sounded melodiously enough the praises of the things they delight to honour. In this respect, at any rate, Mr. Austin may claim continuity with his great predecessors; and if we miss in his verse the depth of thought which characterized the one, and the numberless delicate touches, the exquisite music, which distinguished the other, we feel that he is, in his measure, as true a nature-lover as either. And it is as a Selbornian in the spirit, if not in the letter, that we are able to welcome the new wearer of the laurel crown. Lord Tennyson was long President of the Selborne Society; Mr. Austin, if we may judge from his writings, cannot refuse to become a member of it.

It is probably a doubtful compliment to praise a verse-writer by profession for the excellence of his prose, but it is as the historian of his garden that Mr. Austin has appeared in these pages. Yet here again his former utterances rise up in evidence against him: for in the same volume from which we have already quoted, we find the future historian of *Veronica's Garden*, and *The Garden that I love*—a title taken from the author whom he so severely criticizes—telling us that poetry "has nothing to do with gardens and garden-seeds, trim parterres, new variations, and watering-pots." "Garden poetry," he says, "besides being imitable, is variable and subject to fashion, whim, caprice. Shakespeare, Byron, Shelley, have nothing to do with gardens and gardening; their concern is with the permanent aspects of Nature."

Still, it is in these books about gardens and gardening that we find Mr. Austin at his best, just as in his first effort since his promotion * we have him at his worst: and from his garden books we propose now to select a few not unfavourable specimens of the work of the new Laureate.

Here is a sonnet from Italy which touches the home-note.

A DREAM OF ENGLAND.

Here, where the vine and fig bask hand-in-hand,
And the hot lizard lies along the wall,
Blinded I shrink where cypress shadows fall,
And gaze upon the far-off mountains bland;
Then down the dusky track Lorenzo planned,
Watch the slow oxen oscillating crawl
Sleek in the sultry glare, and feel withal
Half alien still in a familiar land.

But when from out the stone-pine slopes that rise
In the clear ether, black against the blue,
The cuckoo suddenly calls, I close mine eyes
In visionary rapture, think of you,
Hear the home-music of your Kentish skies
And dream that I am drenched with English dew.

"Bland" does not seem in keeping with "the far-off mountains," it is rather one of those tributes to the exigencies of

* "Jameson's Ride."

rhyme which abound in Mr. Austin's verses, but "the stone-pine slopes, black against the blue," is a graphic, if an obvious, touch.

A longer poem, "The Fallen Elm," contains some of those pictures of the seasons which Mr. Austin draws with much appreciation and accuracy, albeit a little too frequently.

'Twas pleasant, when sap began to stir,
And branch, spray, and bud to shoot,
To hearken the newly-paired partridge whirr,
And the croak of the pairing coot.

* * * * *

Now, when jackdaws starve and the blizzard bites,
And the furrows are flecked with sleet,
And the owl keeps snug in the thatch o' nights,
And the waggoner chafes his feet;

When the empty nest in the leafless hedge
Sits sad where the sweet birds sang,
And the mallard croaks in the frozen sedge,
And the wings of the wild geese twang;

When the lean hare nibbles the birch-tree bark,
And the stoat grows lank and thin,
And the cub of the vixen prowl the dark,
And the gossips sit and spin.

* * * * *

Spring, however, with its flowers and birds, is Mr. Austin's favourite season. Here are a few verses from

THE PASSING OF SPRING.

Spring came out of the woodland chase,
With her violet eyes and her primrose face,
With an iris scarf for her sole apparel,
And a voice as blithe as a blackbird's carol.

* * * * *

Then the windflower looked through the crumbling mould,
And the celandine opened its eyes of gold.
And the primrose sallied from chestnut shade,
And carried the common and stormed the glade.

In sheltered orchard and windy heath
The dauntless daffodils slipped their sheath;
And glittering close in clump and cluster,
Dared norland tempests to blow and bluster.

* * *

Then, tenderly ringing old Winter's knell,
The hyacinth swung its soundless bell;
And over and under and through and through
The copses there shimmered a sea of blue.

Like a sunny shadow of cloudlet fleeting,
Spring skimmed the pastures where lambs were bleating;
Along with them gambolled by bole and mound,
And raced and chased with them round and round.

If Spring is Mr. Austin's favourite season, the primrose—as perhaps would be expected of so staunch a Tory—is the flower of his choice. This, the first part of a poem entirely in its

SWINFORD OLD MANOR.

honour, is appropriate to the coming month, and with it we must close our selection.

PRIMROSES.

Latest, earliest, of the year,
Primroses that still were here,
Snugly nestling round the boles
Of the cut-down chestnut poles,
When December's tottering tread
Rustled 'mong the deep leaves dead ;
And with confident young faces,
Peeped from out the sheltered places
Where pale January lay
In its cradle day by day.
Dead or living, hard to say ;
Now the wind-March blows and blusters,
Out you steal in tufts and clusters,
Making leafless lane and wood
Vernal in your hardihood.
Other lovely things are rare,
You are prodigal as fair.
First you come by ones and ones,
Lastly in battalions ;
Skirmish along hedge and bank,
Turn old Winter's wavering flank ;
Round his flying footsteps hover,
Seize on hollow, ridge, and cover ;
Leave not slope nor hill unharried,
Till, his snowy trenches carried,
O'er his sepulchre you laugh,
Winter's joyous epitaph.

After all, it is not Mr. Austin's fault that he follows two poets. He will probably do very creditably all that is required of him, and if his verses do not achieve immortality—well, most of the Laureates who preceded him may claim him as a brother.

By the kindness of Messrs. Macmillan, we are enabled to give an illustration of Swinford Old Manor, the house to which is attached the delightful garden which forms the subject of Mr. Austin's books, previously noticed in these pages.*

"**Carnage or Sport ?**"—The following letter from Colonel Coulson appears in the *Daily Chronicle* of December 8th :—"We seem to be losing our manliness or self-respect. Every day now tells of some hideous slaughter of semi-tame pheasants, sandwiched in with hares and rabbits. The narrations are as sickening as they are distressing, as mean as they are unsportsmanlike. At one big 'shoot' lately, 8,900 pheasants were mowed down in three days. At another 1,300 of these birds were killed in three-quarters of an hour ! Slaughters like these, and they are of daily occurrence, are turning sport into a cruel mockery ! Sending a score or two of these meanly-killed birds to a hospital in no way palliates the offence, for such it is. And there are always large numbers wounded that, owing to the shortness of the days and the ground to be covered, are left behind slowly dying, creeping about the woods and ditches in all stages of wounds, and suffering a silent agony that words cannot convey to the understanding. Left, alas ! for days a sad spectacle, and a reproach to man's—ay, and woman's—callous indifference to suffering."

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* See *N.N.*, 1894, 130 ; 1895, 216.

AN APPEAL TO THE CLERGY.

[The Society for the Protection of Birds has just issued to the clergy 10,000 copies of the following appeal on the wearing of feathers, to which we gladly give such additional circulation as its publication in our pages may afford.—Ed. *N.N.*]

AT a Committee Meeting of the Society for the Protection of Birds, held in London November 7, 1895, it was resolved that an appeal be made to the clergy and ministers of all denominations, to use their influence against a fashion which is notoriously out of harmony with our enlightened and humane age, and inimical to the best interests of a religion of mercy.

It was at one time hoped that the promulgation of the ugly facts, in such a manner as to leave few or no persons in ignorance of them, would suffice to make such a fashion impossible in a Christian country. And it was doubtless in great part due to this movement, welcomed and warmly seconded by the press throughout the country, that, during the last two seasons, bird and feather wearing fell into something like disrepute. But the present autumn has brought bitter disillusionment. Many ladies have become avowedly indifferent as to the manner in which the decorations they affect are obtained, and, callous themselves, do not hesitate to outrage public opinion. Those who are engaged in the vile business of supplying the demand for feathers, are sending fresh orders to various points on our coasts, where sea-birds are known to gather, and to distant regions of the earth, to continue the work of devastation. More feathers, more wings and carcasses, are wanted. Drapers' and milliners' shops are once more stocked with the spoils of God's loveliest and most defenceless creatures, slaughtered at woman's behest; while aigrettes formed of egret, or bird of paradise, plumes, or both, are seen in all places where women congregate, even in our churches. This matter deserves the serious and immediate attention of all ministers of religion. It is a distressing experience, not only to the writers of this appeal and the thousands of men and women for whom they are entitled to speak, but to numberless others, to sit at service, Sunday after Sunday, in the midst of a forest of waving feathers, with which so many heads in every congregation are decked. For the visible ornaments cannot be dissociated from the image of a desolated nature; nor, by any process of mental jugglery, can those who are aquainted with the facts and persist in following such a mode, be accounted guiltless of the criminal war of extermination which is being waged against bird-life.

In the case of some species which are being extirpated, or made rare, for the sake of their feathers, the fashion may be simply characterised as stupid and selfish in the higest degree; in other cases it is unutterably cruel. Thus, it is known that when the smaller gulls and sea-swallows, or terns, are shot for

their wings, the fowlers in their haste do not stop to kill the wounded birds, but merely wrench the wings off, and cast the birds back to die in slow agony on the water. The wretches who are engaged in this work come at last to take pleasure in it, and regard it as good sport; the birds, they have been heard to say, when their wings are being wrenched off, "cry or scream, just like a child."

Equally shocking is the case of the white egret. It is known that the aigrette, so much affected by women in head-decorations at the present time, is made of the slender, decomposed dorsal feathers of the small white egret, or heron; and that these feathers form the bird's nuptial ornament, being acquired at the pairing time, or love season, and shed when the breeding is over. The birds inhabit heronries, and it is in the breeding season that they are sought for by the feather-hunters: for it is only at that time that they are found congregated together in considerable numbers. It is then, too, that their anxiety for the safety of their young makes them fearless of the gunners, the instinct of self-preservation being overmastered by the love of their offspring.

As they hover in a white cloud over the heads of the hunters they are shot down without trouble; and when the few ornamental feathers have been plucked from each bird, the carcasses are thrown down in a heap to fester in the sun, and the fledglings are left to starve in the nests.

This subject was referred to by the *Times* of October 17, 1893, in a leading article on "Feathered Women," from which we quote the subjoined passage:—

"How long will women tolerate a fashion which involves such wholesale, wanton, and hideous cruelty as this? If their sense of humanity is too feeble, will not their native sense of maternity arouse them? The case of the egret is not a singular one. Of nearly all the birds with which women adorn their dress, the nuptial plumage is the brightest, and, therefore, that which is most in demand. Let every woman who adorns herself with a dead bird, or with plumage only to be got by wanton slaughter, think first of the bright and joyous being that has died in order that she may be smart, and then of the callow fledglings lingering in desolate starvation in the ravished and deserted nest. If these things were fully known, surely there is no good and reflecting woman who would care, and no bad or thoughtless woman who would dare, to wear the feathers of birds thus cruelly slaughtered. And why should they not be fully known? *If in every pulpit of the land this shocking story of the egrets were told, surely for once humanity would prove stronger than fashion.* Let it be clearly understood, once for all, that the feathered woman is a cruel woman, that for the sake of a passing fashion, which pleases no rational being and should disgust all who can think and feel and understand, she brings dishonour upon her sex, and robs nature of its beauty without adding to

her own. 'Feathers,' wrote Professor Newton, 'on the outside of any biped but a bird naturally suggests the association of tar.' We could wish it were possible to make every woman fee that by wearing feathers she tars herself with the brush of cruelty, and outrages, unconsciously it may be, but still inexcusably, the best instincts of her womanly nature. Only so can the Moloch of fashion be cheated of those innocent victims which are now sacrificed in countless numbers on its altars."

The *Times* is not alone in its belief, expressed in the words italicised, that the clergy have the power, if they would but exercise it, of dealing effectually with this evil. As much has been said, and continues to be said, by many organs of public opinion. "Peradventure," writes Sir Herbert Maxwell in the current number of *Good Words*, "the thought may enter the mind in one of our fashionable London churches, while the preacher sends a sympathetic thrill through a forest of feather-decked bonnets, how he might venture sometimes to chide the cruelty of fashion, as well as its vanity and selfishness." The thought is everywhere, and is more than a sufficient justification of the present appeal. As Canon Rawnsley said, in a sermon preached at Crosthwaite Church, on Martinmas Sunday of last year, it is a travesty of religion, and a mockery, for women with heads decked with aigrettes to sing in the words of the *Benedicite*, "O all ye fowls of the air, bless ye the Lord, praise Him and magnify Him for ever!"

If too high an estimate has been formed of the influence possessed by the clergy; if they, like others, feel powerless in the face of this sudden flood of barbarity; it is, nevertheless, clearly within their province to lift up their voices against the desecration of the Churches; and it is certain that in so doing they would have the heartfelt approval of all right-thinking persons.

W. H. Hudson.

THE MYCETOZOA.*

IN our number for January, 1892, the author of the new *Guide to the British Mycetozoa*, published under the title of "An Open Field," a most useful introduction to the knowledge of these interesting plants. That introduction will be found a suitable prelude to this enumeration, by the publication of which, at so nominal a cost, the Trustees of the British Museum have conferred a boon upon field naturalists.

The Mycetozoa, as Mr. Lister pointed out, may be sought in damp woods, decaying leaf heaps and juicy bogs; in fact, wherever there exists moisture and decaying vegetation. One of the most romantic situations in which they might be

* *Guide to the British Mycetozoa*, exhibited in the Department of Botany, British Museum, by Arthur Lister, F.L.S. Pp. xlii., 43 figs., 8vo. Price 3d.

found, and that abundantly, would be in an old bit of forest, with a northerly aspect, where the ancient trees have been allowed to lie just as they fell, and where, for many years, they have been saturated with moisture, attacked by fungi, and partially concealed by the undergrowth. Here these creatures revel, and in favourable seasons are to be found in large quantities feeding on the decayed wood. Many a quiet hour has the writer spent in such haunts observing their habits, and with this consciousness, which may be especially commended to Selbornians, that although *alive* there is no pain inflicted in obtaining specimens, nor is it likely they will be exterminated by copious gatherings. Sometimes a species will occupy many square inches with its creeping plasmodium resembling a network of veins, or the perfect fruits may be seen by their thousands in certain common species, while at other times only a few tiny sporangiæ, or a compacted cluster will attest the presence of a rarer kind.

CRIBRARIA AURANTIACA.
a. Group of sporangia × 2.
b. Sporangium after dispersion of spores × 20.

LYCOGALA MINIATUM.
a. Three æthalia, nat. size.
b. Capillitium × 150.
c. Spore × 600

But it may be asked, What are the Mycetozoa? And this question, like many others, is more easily asked than answered. Suffice it at present to say that they appear to be connecting links between the animal and the vegetable worlds, as they exhibit phenomena in their mode of life that are regarded as belonging to each of these kingdoms. They have a motile stage in which they are true "creepers," wandering at their sweet wills over dead leaves, or in decaying wood where they seek their their food, and eventually becoming sessile, to form their sporngia.

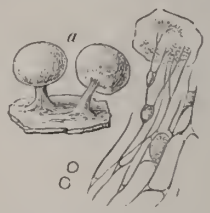
Although there is no royal road to a true and intimate knowledge of these creatures, yet the way has been rendered easy by the labours of recent observers. Amongst these, honourable mention must be made of the work of Mr. Arthur Lister and members of his family, whose investigations have added largely to the sum of human knowledge of this subject. The *Guide* already mentioned may be taken as an index of their labours. It is descriptive of the expressive specimens and beautiful drawings now on view in the public gallery of the British Museum, South Kensington. The artistic treatment of the subject has been trusted to the skill and knowledge of Miss

G. Lister. The whole are suggestive of a vast amount of work from which such condensed results have been drawn, and which have a larger expression in their elaborate *Monograph of the Mycetozoa*, also published by the authorities of the British Museum.

It must not be supposed that the labours of Mr. Lister and his coadjutor, extensive as they have been, have exhausted the subject. It is still "an open field:" there is yet abundant room for original investigation, many points in the life history of some species are obscure or altogether unknown. Some of them have the unhappy habit of creeping in the *interior* of decayed logs, and

BADHAMIA UTRICULARIS.

a. Cluster of sporangia × 3½.
b. Fragment of capillitium and spore-cluster × 140



DIDYMIUM EFFUSUM.

a. Two sporangia, one entire, the other showing columella and capillitium × 12.
b. Capillitium and fragment of sporangium-wall, with crystals of calcium carbonate and two spores × 200.

not emerging till they are ready to fruit, so that certain phases of their life are hidden from view. Further, as their minute spores are so easy of distribution, one has always the tantalizing hope that some hitherto unrecorded British form may reveal itself, as there seems very little limit to their geographical range, at least, in temperate and tropical climes. Mr. Lister states that specimens of certain species from Central Africa, North America, and Britain are identical both in general habits and in microscopic detail.

Many portions of Great Britain still await investigation, and hitherto it has been noticed that any part that is carefully searched has yielded one or more species, previously unrecorded for these islands. As examples, it may be mentioned that *Badhamia nitens* is known only from Herts and Beds, *Cribraria violacea* from Bucks, *Lycogala flavo-fuscum* from Beds, *Physarum citrinum* from Herts and the borders of Beds, *Dianema Harveyi* from Dorset, and *Cienkowskia reticulata* from Leicestershire.*

Nothing would be more gratifying to Mr. Lister than that the publication of his works should stimulate inquiry in this subject, and that the hitherto unexamined portions of this country should yield their hidden treasures to some earnest students of the Mycetozoa.

JAMES SAUNDERS.

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* The accompanying illustrations are examples of those given in the *Guide*: for the explanation of the terms employed we must refer to the book itself, not the least important feature of which is its explanatory introduction.

[So many readers availed themselves of our offer to post to them the *Guide to British Fungi* that we make a similar offer with regard to the *Guide to the Mycetozoa*, which, like the former work, can only be obtained at the British Museum (Natural History). We shall be glad to forward the Guide by post on receipt of 4½d. in stamps. Those wanting copies should write to Mr. Britten, British Museum (Natural History), Cromwell Road, London, S.W.]

NOTES ON LONDON BIRDS IN 1895.

ON January 11, I noticed a fieldfare flying over Hyde Park. On the 22nd, a dull day shortly before the great frost set in, which lasted till the end of the third week of February, hundreds of skylarks passed over London; during the afternoon they were continously passing over Lincoln's Inn in parties of from ten to fifty, flying not more than twenty feet above the chimneys. They all appeared to be flying almost due west, as is usually the case before we have bad weather in town. The *Field* for February 2, 1895, contained a note that a gardener at Highgate saw "a very large flock of snowbuntings" on this very day, which passed "from N.N.E. to W." I have very little doubt that the birds in question were really skylarks; the under-surfaces of their bodies, even in the dim light of the afternoon, appeared very white against the dirty, foggy sky over-head.

When the cold weather had fairly set in, seagulls came up the Thames in large numbers. Last year (NATURE NOTES, 1895, p. 49), I drew attention to the curious influx of gulls during the spring of 1894, but the scene from the Thames Embankment in February, 1895, quite put previous invasions into the shade. At one period, when the river was almost blocked with masses of floating ice and snow, the gulls were to be seen in thousands, and the river presented quite an Arctic appearance. The wretched birds were very hungry, and would take bread from the hand. It was said that some "sportsmen," who could not let such a golden opportunity slip, fished for the starving birds with some success, with a hook and line! Quite ninety-nine out of every hundred of these birds were black-headed gulls, but I also saw a few kittiwakes, herring and common gulls among them. During the cold weather various species besides gulls were reported. Two eagles were said to have been seen near Westminster; and a stormy petrel was caught in a yard at Blackwall. My sister believes she saw two terns near Westminster Bridge on February 14; and Mr. Harting records the fact that he saw a little gull by the Thames Embankment on the 15th (*Zoologist*, 1895, p. 110). After the frost broke the gulls gradually left, but a considerable number were to be seen in Hyde Park and St. James's Park for some time later.

On March 6, I saw a pied wagtail in Green Park. The London singing birds seemed to have agreed to celebrate the advent of spring on March 7 ; on that day, although rather raw and cold, thrushes, robins and hedge sparrows were all singing hard. I did not hear the blackbird till the 9th. It was also on March 9 that I happened to ask one of the keepers in Kensington Gardens whether he thought that the crows, which have frequently nested there, would return this season. He replied that he did not think it likely, because the authorities were trying to shoot them, and that on that very morning a man had been out after the crows with a gun. In reply to an appeal to the authorities, which I made without delay, I was merely informed that the crows were so destructive to the young birds and rabbits that they could not be encouraged. Considering that the nesting of the crows in Kensington Gardens is one of the most interesting and remarkable sights in the whole of London, it is ridiculous to put forward the occasional loss of a duckling or sparrow or young rabbit as a reason—or rather an excuse—for shooting at them. I am glad to be able to say that some crows are still to be seen, so they have not yet been exterminated, but so far as I know they did not nest last season in Kensington Gardens.

On March 10 a greenfinch was singing in Regent's Park, but I did not hear the song of the chaffinch in London until the 12th. On March 24 I noticed another pied wagtail—this time near the Round Pond ; and on the 31st heard that rooks were hard at work repairing their old nests in Connaught Square. By the third week of April five out of the six nests appeared to be occupied, but two were subsequently deserted for some reason.

In April the spring migrants began to appear in Kensington Gardens. On the 6th I saw and heard the chiff-chaff ; and on the 7th, while looking for birds before breakfast, I found a splendid cock redstart, and others were seen on the 8th, 10th, and 22nd. A willow wren was singing on the 10th, but my friend, Mr. George Henderson, had observed one on the previous day close to the Long Water. There were a good many of this species about the Gardens throughout the remainder of the month.

On the afternoon of March 10 a magpie flew over the Law Courts in the Strand and went out of sight in a southerly direction. Swallows appeared on the 21st in Hyde Park.

A wood wren was reported to me from Kensington Gardens on May 1. On the 5th a blackcap was singing gloriously in a shrubbery within 200 yards from the Bayswater Road, and on the 13th and 14th the reed warbler was to be heard by the Serpentine. House martins were seen over the Serpentine on the 19th, and I was told that a cuckoo was heard in Kensington Gardens on the 30th. All these birds merely passed through town, but the spotted flycatchers which appeared on the 7th remained as usual in small numbers to nest. Very little was seen of them during the cold weather in the middle of the month, but I saw several young birds later in the summer.

A chaffinch took up his abode in Lincoln's Inn Fields about May 13. He could be constantly heard singing till the middle of June, but I never saw a hen chaffinch or anything to indicate that the bird nested there.

On June 5 a yellowhammer was singing by the north side of the bridge over the Serpentine; the only other bird of this species which I have ever seen wild in London was in Lincoln's Inn on April 1, 1889 (see NATURE NOTES, 1891, p. 124). Near this bridge I observed two swifts on May 16, and there were several to be seen during August in the same neighbourhood.

A large colony of starlings roosted throughout the summer in the tall trees by the enclosure where the peacocks are kept. In August—owing no doubt to the addition of young birds—the numbers were greatly increased, and there must have been about a thousand birds there every night. Towards the end of August I noticed a good many sand martins and swallows over the Long Water, and after my return from my holiday early in October there were still a few swallows about.

On October 30 a dabchick was diving in the Long Water near the bridge. This is a very rare sight now, although these birds still appear in St James's Park every summer. A meadow pipit in Hyde Park on October 31 reminded me that this species does not seem to visit London nearly as often, nor in such large numbers, as was formerly the case.

There was a fine adult great black-backed gull over the Thames opposite the Temple Gardens on Guy Fawkes Day, with some herring and black-headed gulls. This was my last observation in 1895 worthy of mention.

A. HOLTE MACPHERSON.

"BILLY."

SOME years ago, when leaving our old home in the country, we had to part with all our pets, amongst others some call-ducks, a pair of which we gave to a friend. The son of this pair is the hero of this little history. He was the only survivor of some that were hatched when my friend was abroad, and he received the name of "Billy" from those who had charge of him.

Billy was brought up by a white Cochin-China hen, who no doubt felt all the tenderness for him an only child inspires; and he returned his foster-mother's love with all his little heart. He would never leave her, and regularly, as breakfast and supper time came round, he was to be seen in the rear of the struggling mass of fowls, slyly pecking the legs of all the lordly beaux and chuckling dames of the yard, and so driving them away to make room for *his* hen.

The next spring, and ever afterwards, when the hen was sitting, Billy would take up his residence in an empty nest next door to hers, and there he would sit in the dark until she was at liberty to walk about with him. Now I must tell you that there were plenty of eligible young lady ducks of his own kind about, but he was never known to go down to the water, with its enticing reedy banks, hovering dragon flies, and darting tadpoles, and where every season brought a fresh supply of dainty morsels to tempt ducks' appetites. All his life he never associated with the ducks, nor would he even look at one fair white maiden who was bold enough to make great advances to him. No, Billy would have nothing to say to her; so no doubt she went off in a pique, made eyes at and conquered one more susceptible to her charms than Billy, who was left to follow his own queer little ways with his hen.

They went on living in this way for about ten years, when at last a sad day dawned for Billy, for his dear hen died of "advanced age." After that poor Billy evidently lost all interest in life, and all his spirit deserted him, and there is no doubt the ladies and gentlemen of the yard, seeing him unprotected and despondent, thought the time had come to pay him out for the many pecks their yellow "stockings" had received from him in times past. Anyway, after a time he was found to have one eye sadly injured and quite sightless—the result of a peck—and the other eye becoming affected, he was with sad necessity hurried off to the happy hunting-grounds of duckland—although I am sure if he had had his choice he would have preferred henland—and his owner, in much grief, buried him under the tree he had passed so many happy days in his youth.

M. L. Goodacre.

BIRDCRAFT.*

This book has been written for those inhabitants of the Middle and Eastern States of the so-called United States of America, who answer in the affirmative the question which is the opening sentence to the reader, "Do you want to know the birds and call them by their familiar names?" Four introductory chapters, on the "The Spring Song," "The Building of the Nest," "The Water Birds," and "Birds of Autumn and Winter," are followed by some hints how to name the birds. And it is to be remarked that the book is an attempt to help the disciples of the craft to do this in such a way that in the end they shall be able to answer again in the affirmative another question, viz., "Hast thou named all the birds without a gun?" The body of the work consists of a synopsis of bird families and biographies of the two hundred species of birds treated of. The latter are given in a systematic form, though they are not in all cases quite uniform,

* *Birdcraft.* A Field Book of Two Hundred Song, Game and Water Birds, by Mabel Osgood Wright; page plates containing 128 birds in the natural colours, and other illustrations (10 coloured and 5 plain plates), pp. xvi., 317, 8vo. New York and London: Macmillan & Co., 1895. Price 12s. 6d. net.

and tell us the length and colours of the birds, what sort of song or note they possess (this is omitted in some cases), the season at which they are to be seen (the author lives in Southern Connecticut), their breeding range, the materials of their nests, the colours and numbers of their eggs, and their range in the world. A general and often very pleasing account of the life habits—varying considerably in length—is appended in each case, and should prove both useful and interesting to anyone taking up the study of field ornithology in New England. The two hundred species chosen for description from the A.O.U. list of over nine hundred species of North American birds are for the most part selected as being those which will be the most likely to interest bird lovers living in the temperate parts of the country. But the most notable feature in the book is the attempt (which seems to us very likely to be a successful one) to enable the student to learn the names of the birds he meets with by the aid of a key. Scientific ornithologists are familiar with keys adapted to the study of museum skins, but as far as we are aware this is the first instance in which a key in popular form has been prepared and adapted for the use of the field ornithologist who does not shoot birds, and we should be glad to see such an idea carried out in reference to the birds of this country. Miss Wright, in the first place, divides her birds into three great divisions, viz., land birds, birds of prey and game, shore and water birds. These again are subdivided so far as it is necessary to do so. We may take the first division as an example. This section is divided into, A, birds conspicuously red or orange; B, birds conspicuously blue; C, birds conspicuously yellow; D, birds conspicuously black, dusky, or dark grey; E, brown or brownish birds, of various sizes and markings; F, daintily plumed small birds feeding about the branches and terminal shoots of trees; G, the creeping birds of various sizes, seen upon the trunks and branches, feeding upon bark insects; H, winter birds of meadows and uplands; I, birds of the air, constantly on the wing, feeding as they fly.

It is pretty certain that the student who follows the authoress's directions, and having read the synopsis of the bird families in order to gain an idea of their grouping, goes carefully through the key with the particulars of the birds he has seen (jotted down at the time in his note book) before him, will have a very good chance of naming the particular species he has met with.

There is a good deal of very interesting matter in the introductory chapters. In one the songs of many of the birds are very pleasingly put into syllables. We are sorry that we have not the advantage of an acquaintance with North American species in life, and so cannot say whether these songs in words convey a clear and accurate impression of the birds' notes or not. But they certainly give one the impression of truth, and the wording of the strain sung by the common song sparrow ("Maids, maids, maids, put your kettle-ettle on"), reminds us very strongly of the chant of another song-sparrow which we knew well in South America. Many curious and beautiful nests are built by the birds of the Eastern States, and a good many of these are described, not only in the biographies, but also in the chapter on "The Building of the Nest." The authoress quotes some amusingly descriptive remarks of a farmer upon nests in general. He disparagingly includes "humbirds" among those species which do not make any "reg'lar sort o' nests," and anyone who has ever found the nest of a humming bird will especially appreciate this worthy's descriptive powers when he goes on to say that these birds "jest sets down right wherever they see a round o' moss on a branch, and the warmth o' them makes the moss grow up a bit, but I don't call that a nest."

We are not surprised to find that the authoress regards the English house sparrow as an enemy of the song birds and loves it not; but if perchance these lines should catch her eye, we would, in the name of the Selborne Society, pray her most earnestly not to give poisoned corn (p. 29) even to the hungry crows in snow-time, lest in killing a few of these "cannibals," indiscriminate slaughter should be brought about.

There are from seven to nineteen figures of birds on each plate, adapted and grouped from the works of Audubon, Dr. Warren, De Kay, and from Mr. J. L. Ridgway's illustrations to Dr. Fisher's *Hawks and Owls of the United States*. They are naturally, therefore, of very unequal merit. Those taken from the last-named work are incomparably the best, although the colours in these two plates have not been reproduced. For the rest we can only say that they will be useful

to, and better than nothing for, a beginner. They are of course drawn to all sorts of scales, and although in the page of description which immediately precedes each plate, we are told about upon what scale each species is figured, it is a little tiresome to have perpetually to turn back to it. And it is a little startling at first to find, for instance (plate vi.), a meadow lark (two-fifths natural size) represented as a much more bulky bird than the mourning dove (one-seventh natural size). There are plenty more cases of this kind.

This nicely got up book can be recommended not only to those American readers for whom it was primarily intended, but also as a guide-book to any British field ornithologist who pays a visit to the Eastern States, and is anxious to learn something about the birds of the country. From all accounts there are plenty to be seen even in Central Park, New York City.

O. V. Aplin.

SHORT NOTICES OF BOOKS.

The Plants of the Bible, by the Rev. George Henslow, M.A., F.L.S., &c., (Religious Tract Society, pp. 128. Price 1s.) Mr. Henslow's little book is one of a series of educational books under the title "Present Day Primers," which promise to be valuable aids to all interested in the study of the Bible. There is necessarily a good deal of uncertainty about the plants that are mentioned in the Bible; the popular names of plants used by the Hebrews were no more precise than those in use by us. The same name may often be applied to many different plants, while a single plant may have a large number of names. Then we have to deal with the English designations adopted by the translators of the authorized version at the beginning of the seventeenth century, a time when geographical botany was unknown and precision in botanical names had not been acquired. The revisers have tried to remedy the faults of their predecessors, but not always with success. Mr. Henslow has prepared his little volume with obvious care; he has investigated the etymology of the Hebrew names to see what light they throw on the plants designated, and has then examined the words used in the LXX. version. Greek and Latin botanical writers give him valuable hints, and more than all, the botanists of our own day, who, being acquainted with the plants of Palestine have written on those mentioned in the Bible, have been helpful. Having digested these sources of information, and utilized his personal knowledge of the Mediterranean flora, Mr. Henslow has given us a useful and valuable volume. Each plant is dealt with in a separate article, and the whole are grouped under various headings such as herbs, fruit trees, timber trees, &c. For easy reference this is an inconvenience, as a particular plant can be found only through the index. Much of the comfort of use is lost by not having the articles arranged alphabetically in a single series. The process blocks from herbarium specimens are not equal to the letterpress. Their replacement by good woodcuts, and the re-arrangement of the articles might well be adopted in a second edition.

The happy alliance which has been formed between Messrs. Bell & Sons and the Humanitarian League, to which we referred in our December number, is being continued with satisfactory results. Here are four more of the "Animal Life Readers," all well printed, suitably illustrated, neatly bound, and moderate in price (1s. each). It may be old association which induces us to give the preference for the volume which contains Mrs. Trimmer's *History of the Robins* and *Keeper's Travels in Search of his Master*, and perhaps it is the same feeling which makes us rather resent the rewriting of "the greater part of the book, to adapt it to the taste of the present freer and less precise age." *The Animals on Strike* comes to us from America, and is likely to be new to English readers: with it are some of Mrs. Beecher Stowe's stories from the volume called *Queer Little People*, an excellent collection which is still to be had. Miss Edith Carrington is responsible for *From Many Lands* and *Man's Helpers:* the former is a capital selection of accounts of animals, birds, &c., from various regions, illustrated by useful maps,

showing at a glance the distribution of certain creatures, as well as by numerous other pictures; the latter is devoted to the animals and birds with which we are familiar at home.

Mrs. Tippoo Tib (S.P.C.K.), by Edith P. Phelps (price 9d.) is a bright little book, which should obtain favour among the defenders of the sparrow, to which race Mrs. Tippoo Tib belonged. Other pet birds are described—starlings and jackdaws—and the little volume is illustrated by Mr. Harrison Weir, who also beautifies most of the "Animal Life Readers." If the children of the present day are not imbued with a due interest in natural history, it certainly will not be for want of suitable literature.

That old favourite, *Reynard the Fox*, finds elegant presentment in the latest addition to Messrs. Macmillan's "Cranford Series" (6s.). Isegrim the Wolf, Tibert the Cat, Kyward the Hare, and all the fraternity, are brought before our eyes in the clever illustrations of Mr. W. Frank Calderon; and Mr. Joseph Jacobs contributes an introduction which is not too learned to be readable. The cunning Reynard seems to have appealed to the medieval mind (for Mr. Jacobs takes him back to the twelfth century) on the same grounds on which the equally unprincipled Brer Rabbit has charmed modern readers—the triumph of cunning over brute force. The career of each "is a long series of making fools of his enemy, and to the primitive mind the 'sell' is the most exquisite form of practical wit." So Mr. Jacobs; and the high favour in which Brer Rabbit is held in many circles nowadays suggests that it is not only "the primitive mind" that delights in a "sell." Mr. Jacobs traces the various folk tales which are woven into the connected tale, and incidentally points out that the story of the Wolf being induced to fish with his tail and getting it frozen in the ice, with which we are familiar in many variants—there are a hundred and seventy-one of them, Mr. Jacobs tells us—first made its appearance in literature in this story, though as a folk-tale it must be much older.

Mr. J. J. Sowerby's *Rooks and their Neighbours* (Gay and Bird) is more widely leaded than any book we remember to have seen. The letterpress seems to have been expanded in this way to make room for the illustrations (also by the author), some of which are admirable, while all of them show originality. The author modestly disclaims value for his book either from a scientific or popular natural history standpoint; "it is merely," he says, "some desultory gossip about 'Rooks and their Neighbours.'" All the same it is very interesting; and when this handsome issue is exhausted, an edition in cheaper form, with a selection of the illustrations, would probably have a considerable sale. We hope Mr. Sowerby will give us more work of this kind, and that he will not fail to illustrate his future writings in the same way. The children on p. 103 show one direction in which his talents do not lie, and the last picture is spoilt in the printing or otherwise.

It appears from the excellent bibliography which accompanies all Messrs. Macmillan's standard works, that this charming pocket edition of Chas. Kingsley's *Water Babies* represents the twenty-first printing of the book, which first made its appearance—it does not seem so long ago—in 1863. One wonders, therefore, where the readers of this new issue are to come from. There must, however, be many who will be glad to obtain for eighteenpence what has hitherto been priced at more than double that sum. *The Water Babies* is among the books which one is tempted to wish one had never read, in order to have the pleasure of doing so now for the first time. We hope that Tom and Ellie will find many new friends among the rising generation, and that the wise teachings of Mrs. Do-as-you-would-be-done-by will fall upon receptive ears.

We had marked several passages in the December number of *A Beautiful World*—the journal which the Society for Checking the Abuses of Public Advertising generously sends to its members—but space (or the want of it) prevents their insertion. We are glad to see that NATURE NOTES is quoted with approval; Selbornians have so much in common with the Society for Checking, &c., that we trust many of their number will send the modest subscription demanded—half-a-crown—to its hon. treasurer, John Richmond, Esq., 7, Great College Street, Westminster, S.W., and so secure for themselves *A Beautiful World* as it appears.

SELBORNIANA.

"**Object Teaching.**"—An important circular bearing this title has been recently issued by the Education Department, with the view of making the teaching of children less bookish, and of developing in them a love of nature and an interest in living things. For this end, "the children should be encouraged to bring with them to the lesson illustrative specimens which they have collected or borrowed from friends." The long lists appended suggest as objects various beasts and birds, including squirrels, thrushes, larks and robins, owls' feet and woodpeckers' tongues, nests and eggs, and greenery, including sundew and flesh-eating plants. Is there not danger that these suggestions may incite rather than check the tendency to destructiveness among children, by fostering a reckless spirit of collecting, which, spreading over hundreds of schools, may seriously injure the flora and fauna of Great Britain?

Vaughan House, Croydon. E. PHILLIPS.

[The *Brighton Herald* of January 4 thus endorses Mrs. Phillips's protest:—"It is pleasant to note that many County Councils have already awakened to a sense of their duties and responsibilities in the matter of the protection of our British birds, and have asked and obtained the Government sanction for the extension of an uniform close time for certain species over wide areas. But another branch of the Government, to wit, the Education Department, has aimed a severe blow at the preservation of our wild birds and animals by the issue of the circular on 'Object Teaching,' June, 1895, No. 369. This ill-inspired circular positively suggests 'Hedgehogs, the tongue of a woodpecker, the singing thrush, lark, robin, and nests and eggs' as fitted for 'object teaching,' and that children should be encouraged 'to bring with them illustrative specimens they have collected and *borrowed* from friends.' The loan of a hedgehog suggests difficulties. It is to be feared that, when the omnipresent Board School boy or girl 'catches on' to this brand-new official idea, our land will, indeed, become desolate, unless, meanwhile, 'the Lords of the Council' should be endowed with sufficient 'grace, wisdom, and understanding' to modify this circular, which contains some excellent suggestions to teachers. It would seem on consideration more needful just at present 'to teach the young idea *not* to shoot' at tomtits or robins or stray magpies with air guns—those ignoble, if still legal, weapons; *not* to sling stones at birds or squirrels, a pastime some boys, ay, and grown men, too, still seem to delight in. It is one of the prettiest sights in the world to see these dainty little animals chasing each other in the Thiergarten in Berlin, scarcely a stone's throw from the 'war monument,' or running freely about in the State Capitol Grounds at Richmond, Virginia. Why should not such things be seen in the public gardens of our own cities?"—Ed. *N. N.*]

"**Feathered Women.**"—It has been said that the wearing of artificial aigrette plumes is almost as bad in its results, as far as example is concerned, as the wearing of the real things. May I suggest that this remark should also apply to the wearing of feathers of any kind, as regards birds generally, whether such feathers are from birds "killed for food" &c., or not. Probably the majority of those who wear feathers are quite unaware what kind of bird they have been taken from. A young girl, for instance, sees some feathers upon the head of another which take her fancy, and she thinks she should like to have something of the kind herself. She goes to the milliner's shop accordingly, and selects what pleases her most; she may or she may not care to inquire whether the feathers are those of some "rare species," or those of a barn door fowl.

C. E. C.

"**Catch Birds Alive.**"—A correspondent calls our attention to the advertisements in a recent number of the *Bazaar*, of which the following is a specimen:—"Catch Birds Alive. Improved self acting spring net traps, 4,600 sold to *Bazaar* readers, all testimonials published during last six years guaranteed genuine and unsolicited. Mr. —— wrote, with permission to use name in advertisement: 'I caught ten bullfinches and two blackcaps, one day with trap.' 1s. 3d. each, two 2s. 4d. post free. Instructions sent." There are nine other advertisements of this kind in the same issue of this widely-circulated paper.

NATURAL HISTORY NOTES AND QUERIES.

The Spotted Fly-catcher (p. 243).—In the wilds of the West Riding of Yorkshire, I have found the young of the spotted fly-catcher still in the nest as late as August. I think this points to their being a second brood, though this bird does not build until rather late in the spring, and in this part of Yorkshire, more than 1,200ft. above the sea level, birds are some weeks later nesting than in the south.

E. G. W.

Mildness of Weather.—It may interest the readers of NATURE NOTES to hear that a hedge-sparrow's nest was found here in a stack of beans on January 6, containing one egg.

Oakley, Brill, Bucks. A. M. G.

Birds and Windows (p. 18).—My experience coincides with that of F. R. I have often watched them feeding close to my window until some sudden movement inside the room has taken place, when they invariably take flight—every variety of bird but rooks. I should like to know the experience of others with birds and small wild animals with regard to sounds. I think that very few, if any, sounds of the human voice alarms them. I have often watched birds feeding on the lawn with perfect equanimity while young people were shouting and chattering quite close to them, as long as no sudden movement was made. The same with mice in the garden. One day a number of children collected to see a tiny mouse eating the seeds on a plant of blue cornflower, and no amount of screaming on their part disturbed it, but a sudden movement - and it was gone! The sound of a gun always puts them to flight, or the slamming of a door. My theory is that it is not the sound of the report of the gun, but the sudden concussion of the air which alarms them, and I am inclined to think that they are unable to hear many sounds which we can hear. I have often amused myself at the profound contempt with which rooks treat the shouting of the boys placed in the fields to keep them off the crops. M. S. Y.

My experience coincides with that of F. R., as I have noticed when watching most birds through a window, only a very slight movement is sufficient to frighten them. Speaking of birds and windows reminds me of what a friend told me the other day, viz., that a robin taps at her conservatory window about four o'clock every afternoon to be let in for the night. She has every reason to believe the same bird came last winter.

Exeter. K. L.

TO CORRESPONDENTS.

WE must request those who favour us with their communications to observe the following rules. We cannot undertake to notice the contributions of any who fail to comply with them.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Notice of Election to Council.—At the Council Meeting held on January 2, Mr. H. Ravenshaw, of Ealing, was elected a member of the Council.

Council and Committee Meetings.—The next meetings of the Council will be held on February 6 and March 5, at 5.30; and of the Magazine and Leaflet Committee on February 20 and March 19, at 5.30.

BRANCH CONTRIBUTIONS.

	£	s.	d.
Abinger	0	1	4
"Atalanta"	0	2	8
Birmingham	3	4	9
Cheltenham	1	0	8
Farnham	0	15	0
Haslemere	0	15	0
"Markwick" (Horsham)	0	3	0
North Somerset	0	10	0
Nottingham	1	5	4
Petersfield	0	5	6
"Richard Jefferies" (Worthing)	0	11	0

NEWS FROM THE BRANCHES.

Atalanta.—Miss Parsons, the Hon. Secretary of the Branch, has now returned from abroad, and members are requested to communicate with her at Twyford Lodge, East Grinstead, on all matters of business. A satisfactory balance sheet for 1895 has been received.

Bath.—On Monday, December 9, an able lecture was delivered by the Rev. W. S. H. Samler, rector of Southstoke, on "Bird Life around Bath." He had observed no less than ninety local species, some of which he described to his audience with great ability. The lecture was illustrated by lantern slides under the manipulation of Mr. E. J. Appleby, many of the slides being prepared by Mrs. Wheatcroft, the local Hon. Secretary. It was mentioned by Mr. Geo. Norman, who presided over the meeting, that the lecturer had presented to the Branch an excellent herbarium of local plants. Attention was also called to the useful collection of books on bird-life which the Branch possessed.

Clapton, Lower Lea Valley.—The third monthly social evening of the session was held on Saturday, January 11, when Mr. C. Nicholson read a very interesting paper on "The Planet Mars," illustrated by drawings and diagrams. The remainder of the evening's entertainment consisted of music and recitations kindly rendered by members and friends.

Croydon.—An excellent lecture was delivered by Mr. F. W. Ashley, F.Z.S., at Seneca Hall on January 16, entitled "Snakes and Birds—are they Related?" The subject was dealt with in popular language, and was listened to with great attention by those present. A series of well-executed diagrams, illustrating the affinities of the *Archæopterx*, Pterodactyl and *Hoatzin*, to modern *reptilia*, was exhibited, and served greatly to elucidate the subject.

Kensington.—Mrs. Greg, Hon. Secretary of the Branch, is anxious to find a successor to undertake the duties which she has hitherto performed, and which she regrets having now to relinquish. Any member who will volunteer to help will perhaps be good enough to communicate with her at 14, Airlie Gardens, W.

Southampton and New Forest.—The Rev. J. E. Kelsall, of East Boldre Vicarage, has kindly undertaken the Hon. Secretaryship of this Branch. On the retirement of Miss L. G. Bull, the Council wishes to tender her its best thanks for the able manner in which she performed the duties of the post.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:

The Selborne Society's Magazine.

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GOOD NEWS FOR WILD BIRDS.

IF any good work is to be done, it is just as well that the would-be worker should be thoroughly acquainted with the tools that lie ready to his hand. Yet it may be doubted whether very many zealous champions of Wild Birds are fully alive to the meaning of the Act passed for their protection in 1880, while still fewer persons, probably, know how to make the best use of the much wider Act of 1894.

County Councils, however, have been waking up during the past year to the opportunity afforded them by these two Acts, and in the coming breeding season there will be few places in the country where protection of some kind or another will not be afforded to wild birds—or at least the rarer of them—and their eggs. On the application of a County Council, setting forth the particular method or methods of protection which they most approve, the Home Secretary may—and does, as a rule—make an Order which has the effect of converting into an offence, punishable by a fine, any tampering with wild birds or their eggs as the case may be in contravention of the terms of the Order. The enforcement of the penalty is left to the local authorities or to private persons, and it is here that vigilant but not too contentious lovers of feathered creatures may be of much assistance. There must of necessity be considerable difficulty in bringing to justice such a fugitive offender as he who illegally takes eggs or kills or snares birds; but many hands make light work, and every Selbornian should put himself quite *au fait* with the state of affairs in his county, and do his best to administer the Acts and the Orders, taking care, however, not to strain the matter into an occasion for multiplying unnecessarily the juvenile culprit.

If in any county no steps have been taken under the Acts, the authorities should at once be stirred up to a sense of their duty.

The first efforts of legislature—in recent years, at least—was the prescribing of a close time by the Act of 1880, of which the effect, as everybody ought to know, is to make it penal, under a small penalty, to kill or take any wild bird between March 1 and August 1, and, under a greater penalty, to kill or take any of the 86 kinds of birds mentioned in the schedule to the Act. That schedule is curiously composed, and must have needed amendment almost from the very first. The following abstract will show the ways in which it can now be improved upon, and in which further protection can be given to birds and their eggs:—

(1) Under section 8 of the Act of 1880, the Secretary of State may extend or vary the close time.

(2) Under section 3 of the Act of 1894, he may order that the protection afforded by the Act of 1880 shall be conferred on any birds which he thinks fit to include in his Order, just as if they had been originally scheduled to that Act.

(3) Under section 2 of the Act of 1894, he may prohibit by Order the taking or destroying of the eggs of any specified kind of wild bird within a whole county, or any part or parts thereof; and

(4) He may set apart definite areas within a county in which it shall be unlawful to take or destroy any wild birds' eggs for a specified number of years.

It will be seen that there is considerable scope for activity in the direction of protecting wild birds, and, though the state of the law may not yet be perfect, it would seem that one or more of the possible methods must surely be found available and calculated to do good in every county. As to the relative efficiency of the various methods, there may be difference of opinion. Our own view is that Nos. 2 and 4 are likely to give the best results if judiciously worked, though No. 3 is undoubtedly the most showy. The reason for this belief is that it is much easier to detect a man or boy going to or coming from the slaying or capture of a bird than it is to spot an illegal theft of eggs. You can see a person go out with a gun, or you may be able to espy the victim of his prowess on his person, but it is very hard to bring to the proof a marauder of eggs, even though his mouth may be full of them at the time. Moreover, there are many eggs of totally distinct birds so extremely alike that the best experts would hesitate to swear that they were the eggs of a protected bird. So much for the superiority of method No. 2, as compared with No. 3. As to No. 4, the creation of well-selected asylums for birds is a most hopeful undertaking. Not only will birds which already nest and breed in such places continue to do so with greater freedom and success, but, in the freemasonry of nature, the news of a safe home is likely to get abroad among other birds also, and thus they will be induced to

exchange a harassed and uncertain family life in their old haunts for the peace and protection of the new enclosure.

As might be expected, there is a good deal of diversity in the way in which various County Councils have looked upon the opportunity given them by the Act of 1894. Some have taken comparatively little notice, others have been inclined to rush blindly at the subject, and adopt all the forms of protection in their widest possibilities. This is where the advantage of the position occupied by the Home Secretary is seen. In the former case he can, it is true, do nothing, but in the latter he can exercise the useful discretion which he possesses. His power to decline to act on what appear to him ill-considered recommendations has been very properly exercised with the view of avoiding any unnecessary increase in the number of opportunities for criminal offence, and has resulted in some measure of uniformity over the greater part of England and Wales. It may here be observed that in Scotland the power of making the Orders described above rests with the Secretary for Scotland, and in Ireland with the Lord Lieutenant; but it is not proposed to set out here in detail the action taken in those countries, though the general remarks apply equally.

We will give a short account of what has been done up to the time of going to press under each species of Order, but before doing so we must ascribe honour to those counties which lost no time in availing themselves of their new powers. Of the two dozen or more Orders which have been made up to the present time, eight were issued in time to be of some service for the breeding season of 1895, though it must be admitted that most of even these were too late to do very much good. Cornwall, Glamorgan, Oxford, the East Riding of Yorkshire, Norfolk, the parts of Lindsey, Lincolnshire, Westmoreland and Huntingdon, deserve credit for their prompt action. Of these it is only natural, seeing that the Act of 1894 owes its existence largely to the agitation raised about the imminent extinction of the Cornish chough, that Cornwall should lead the way by obtaining an Order dated December 12, 1894, declaring the taking or destroying of the eggs of this bird illegal. There, it is to be regretted, the enthusiasm of Cornwall seems to have ceased; for no further steps on behalf of other birds have been taken in that county.

As regards the variation of the close time, six counties have obtained extensions, viz., Bedfordshire prolonging it till August 12—with a special extension of a month both ways for kingfishers—Cheshire adding twelve days at the end of the period assigned by the Act of 1880, the East Riding adding fifteen days in the same way, Hertfordshire widening it at both ends so as to reach from February 15 to August 15, London stretching it from February 1 to August 31, and Northamptonshire carrying it as late as September 1, though making no change at the beginning.

This method of procuring protection for wild birds is, of course, closely connected with the second way which has been adopted by fifteen counties. In Bedfordshire, Cheshire, Devonshire, Essex, Hertfordshire, Huntingdonshire, the parts of Kesteven, Lincolnshire, London, Middlesex, Norfolk, Northamptonshire, Somersetshire, Staffordshire, West Suffolk and Wiltshire a considerable number of birds—too numerous to enumerate here—have been added to the Schedule of the Act of 1880. Since, as has been already indicated, it may be expected that these two methods will prove the most easy to administer efficiently, it is worth while to direct rather particular attention to their effect. During the close time—whether as fixed by the Act of 1880 or as extended by the Home Secretary—the taking or killing of any wild bird is punishable by a fine of five shillings, save and except that owners or occupiers of any land may take or kill on such land any birds not included in the Schedule to the Act of 1880, or added thereto under the Act of 1894, with impunity. Birds so included or added are protected by a penalty of one pound from everybody, even including owners and occupiers. There ought to be little difficulty in enforcing these provisions, and every help should be given to the authorities by private persons interested—and who is not?—in the preservation of our birds.

Then comes the type of Order in the administration of which the greatest scope for activity is afforded, but at the same time the greatest difficulty presented. Twenty counties have promulgated lists of birds, the taking or destroying of whose eggs is to expose the culprit to a fine of one pound for each egg. Bedfordshire, Cheshire, Cornwall, Devonshire, Essex, Glamorganshire, Gloucestershire, Hertfordshire, Huntingdonshire, the parts of Kesteven, London, Middlesex, Norfolk, Northamptonshire, Oxfordshire, Southamptonshire, Staffordshire, Warwick, West Suffolk and Westmoreland have charged themselves with duties of this kind. The birds of which the extinction or serious diminution is sought to be prevented in this manner vary, of course, with the parts of the country. And we have no space to give anything like a complete list of them. A few, however, which have found favour in the majority of the counties may be mentioned. The buzzards and various kinds of hawks, goldfinches, kingfishers, nightjars, nightingales, nuthatches, owls (of nearly all kinds), woodpeckers (the three main varieties), sundry warblers and wrynecks will pretty generally henceforth be relieved of anxiety as to the safety of their eggs. For more detailed information we must refer the reader to the actual Orders; and we would earnestly urge all Selbornians to make themselves well acquainted with the lists in force in the counties in which they may happen to live. Before leaving this branch of the subject it is worth while observing that somewhat special treatment has been meted out to the six counties of London, Middlesex, Kent, Essex, Hertfordshire and

Surrey (particularly as regards so much of them as lies within the Metropolitan Police District), and eggs have been or will be protected in them belonging to birds which elsewhere are expected to look after themselves.

Lastly, there are the special areas set aside to encourage the breeding of rare and timid birds. With care this method may be of very great use, for it will be comparatively easy to administer a provision of this nature, that is to say, the prohibition of all interference with eggs of any kind within specified districts. In eight counties up to the present time arrangements have been made in this direction, and though it is not easy to describe the special areas without maps, a general idea may be given of them. Wicken Sedge Fen in Cambridgeshire, a large part of the Wirral in Cheshire, Lundy, and a considerable stretch of the coast (including the Lynton district) in Devonshire, Spurn Point and its surroundings in the East Riding, much of the sea-coast of East Suffolk and of Essex, not a little of the parts of Lindsey, Lincolnshire, and the majority of the Norfolk Broads have all been marked out in this manner. As it is one of the provisions of the Act that copies of the Orders shall be exhibited in the places affected, it will be nearly as easy as it is desirable for Selbornians to make themselves acquainted with these bird asylums, and to take care that they are generally known and respected.

Here we must close our account of this interesting experiment on behalf of our feathered friends. The description of the Orders has necessarily been brief and bare, but complete information can be gained with comparatively little trouble. Every Order is published in full in the *London Gazette* on the Tuesday or Friday immediately following the date under which the Secretary of State's signature is appended to it, and is also, in due course, printed and put on sale after the fashion of Parliamentary Papers. Hence, though a collection of all the Orders might be somewhat laborious, and perhaps unnecessary, there can be little or no difficulty for any one of our readers in obtaining a copy of the Order affecting the county in which he is most interested. Still further to facilitate this, a list is here added of all the Orders made up to the time of going to press—several others are contemplated—in England and Wales, with their dates. The figures after each Order denote which of the four varieties of possible provisions it contains :—

Bedfordshire (1), (2), (3)	February 17, 1896
Cambridgeshire (4)	September 23, 1895
Cheshire (1), (2), (3), (4)	July 10, ,,
Cornwall (3)	December 12, 1894
Devonshire (2), (3), (4)	November 27, 1895
East Riding (1), (4)	May 10, April 1, ,,
East Suffolk (4)	December 24, ,,
Essex (2), (3), (4)	February 6, 1896
Glamorganshire (3)	March 11, 1895
Gloucestershire (3)	February 3, 1896

Hertfordshire (1), (2), (3)	February 5, 1896
Huntingdonshire (2), (3)	June 25, 1895
Parts of Kesteven (2), (3)	December 26, ,,
Parts of Lindsey (4)...	May 10, ,,
London (1), (2), (3)	February 15, 1896
Middlesex (2), (3)	January 29, ,,
Norfolk (2), (3), (4)...	May 1, 1895
Northamptonshire (1), (2), (3)	January 15, 1896
Oxfordshire (3)	March 22, 1895
Somerset (2)	July 27, ,,
Southamptonshire (3)	September 7, ,,
Staffordshire (2), (3)	November 28, ,,
Warwick (3)	February 4, 1896
Westmoreland (3)	May 29, 1895
West Suffolk (2), (3)	February 7, 1896
Wiltshire (2)	September 5, 1895

JOHN PEDDER.

ANTS IN INDIA AND THE EAST.

IN NATURE NOTES of December, 1894, I made a few remarks on bees and wasps in the Punjab, and I now propose to say a little about ants in that country and the East generally.

I am somewhat diffident in writing upon this section of the *Hymenoptera*, as so many naturalists have, in these recent times, made themselves specially acquainted with much of the social economy of these little communities. Although, however, I cannot pretend to be able to contribute much to our knowledge, yet I have not been unobservant of the habits of one or two types of ants in Malaya; while my friend, Mr. Thomas Barlow, has given me some facts about one species in the Punjab that cannot but be interesting to the more learned.

Without further preface, therefore, I should say that we have both observed that numerous species of ants of both tropical and temperate climes are associated together throughout most parts of India and the East. Dr. Balfour, whom I well knew, states in his *Encyclopædia of India* that he had found that the pervading character of all Indian entomology was its uniformity, and this we can both of us fully endorse: moreover, there can be no doubt that certain forms predominate in certain localities, as, for instance, the great red ant, known by the Malays as "Karanga," has, as far as my observation goes, its principal habitat in the Eastern hemisphere between the latitudes of ten degrees north and south of the equator, while the great black ant, called by the Punjabis the "Lamba Tang," is to be found mostly in the Punjab and the Himalayas.

There have been many diligent students of ants in India, among whom may here be mentioned Dr. Jerdon, of the Madras service, who described forty-seven distinct species in Southern

India, while Mr. Nietner, of Ceylon, sent to the Berlin Museum no fewer than seventy species, collected in that island alone. It will suffice for this short paper if I refer only to the two ants already mentioned.

The "Karanga" is a red, or rather reddish-brown ant, usually of nearly three-quarters of an inch in length. They live in comparatively small communities, and form their nests upon dwarf trees and shrubs: this they contrive to do with much skill by fastening small boughs and leaves together, cementing the edges with a glutinous substance which they secrete. In the Straits of Malacca I have found them, not infrequently, in the "soursop" tree, a plant of the custard-apple order. One has only to approach a tree where a nest of these ants may be, when, in a trice, there is a sudden movement all through the little colony, and I have often wondered how the signal of "danger about" could be so rapidly conveyed, even to those at some distance away. It has been stated that amongst the many powers possessed by these insects generally, they have the faculty of communicating their ideas to one another; and it must certainly appear that at all events with this species there is a special instinct which enables them in a moment to be one and all conscious of a note of warning, which, though inaudible to our ears, is undoubtedly perceptible to them by some means or another. Most of us have seen how chickens recognise the approach overhead of a kite or other bird of prey, and, with a cry of distress, run for shelter; and that is the sort of idea which strikes one upon seeing the sudden alarm of these ants, but with them it is not to escape but to be prepared for attack: they are quite fearless, and if they bite it is with great severity, so much so that they have sometimes been known to leave their head in the wound they inflict, much as an irritated bee will leave its sting. Even the natives of the country have a dread of them, and many decline to ascend small creeks in their "dugouts" if they are aware that any of these insects abound there. Mrs. Pryer, I see, confirms my statement in her recent work, *A Decade in Borneo*.

There is another ant, very similar to the "Karanga," but not so formidable, which is known by the Malays as the "Klang Kea." It builds its nest, too, much in the same way. There is also, I may add, a green ant peculiar to the Malay Archipelago, of similar habits and size, which Dr. Balfour classifies under the name of *Œcophylla smaragdina*.

But I must pass on to give some particulars about the black ant of Northern India from the account given me by Mr. Thomas Barlow. The "Lamba Tang" is so called by the natives in the Punjab to denote its "long-leggedness"; the word "Lamba" literally meaning "long." It builds its nest underground, and exists in very large communities, which may often be observed marching in complete order from place to place, and, as the natives say, they seem never to forget the route to their holes.

They are about three-quarters of an inch in length; have three pairs of legs, the hindmost of which is provided with a claw, but of this there is not sufficient evidence. The males and females are at a certain stage in their life provided with wings.

The natives have a common belief that the "black scorpion" is the king of this species of ant. A farmer of the name of Ghebba stated the fact to Mr. Barlow, and said that he could prove it to him. One day he called Mr. Barlow into his field, and pointed out to him a hole in the ground in which he said there was a nest of these black ants. The hole happened to be near his irrigation mill, so he proceeded to pour water down the hole in large quantities, when the ants began to swarm to the surface in great numbers. "But where," said Mr. Barlow, "is the 'black scorpion'?" "You will soon see, sir," he replied, and continuing to deluge the hole with water, more ants emerged, and finally a "black scorpion," in a half drowned state, which the farmer lifted between two sticks and gave to Mr. Barlow. When the water had cleared away Mr. Barlow put the scorpion on the ground, and, to his amazement, all the ants that were scattered here and there made at once for the "black scorpion," and assembled round it, evincing, as Mr. Barlow said, evident signs of satisfaction.

Here, then, was a proof, to him, at all events, that the ants had clearly indicated that they looked upon the "black scorpion" as playing an important part in their social economy, but whether in a kingly office, or only kept by them to kill insects for their little republic, it is impossible to conjecture. Sir John Lubbock rather favours, I believe, the view that certain species of ants have not only "slaves" but "pets," and here would certainly appear to be some confirmation of his theory.

In the district where this occurred, there was living at the time a scorpion-charmer named Jamal Shah, who had the reputation of being able to allow any scorpion to sting him without his suffering physical pain. Mr. Barlow sent for him, and showing him the "black scorpion," which by this time had regained its natural activity, said, "Now, Jamal Shah, let this 'black scorpion' sting you, and I will believe in your powers;" but when he was told that the scorpion had been taken from a black ants' nest, he declined, saying that he had no spell against the sting of that particular kind, but any "black scorpion" taken from under rocks or stones he was proof against. It is quite understood amongst the natives of India that, after a time, those stung by certain scorpions become in a measure insensible to their poison.

That there is some difference in this type of "black scorpion" is also evident from the fact that a class of native doctors, who prepare a special ointment from the *Arachnidæ*, invariably prefer those obtained from black ants' nests, as affording a more

efficacious liniment. These doctors are called "Euanees" or "Greeks," for they are presumed to have acquired the knowledge of their art from ancient Greece.

J. F. A. McNair.

MARCH MONTH.

Sing a wild song for March,
Mad winds are blowing!
Sing a sweet song for March,
Flowers are growing!

Stormily trumpeting, straight from the pole,
North winds come surging,
Urgently racing to reach their south goal,
Hill and holm scourging.

East winds from Finland blow clean and blow strong,
Shrilling their keenest;
Surely, wherever they smite with their thong,
Grass will grow greenest.

West winds sweep freshly from over the sea,
Blessing the daisies;
South winds slip softly o'er ploughland and lea,
Murmuring praises.

Yea, though we, doltish clods, stupidly dumb,
Lack song sonorous,
Fluting and mellowly gurgling they come,
Birds in full chorus.

Sing then a song for March,
Rough month yet tender;
Ere leaves clothe oak and larch,
Meet tribute render!

J. Lewton Brain.

A Dog Story.—About twelve years ago, on November 5, at 5.40 p.m., on opening a side door of our house leading into the street, we found a Newfoundland dog lying outside, who immediately got up and walked into a room on the left hand, and laid down, where he remained until his master fetched him about 11.30. Every 5th of November after, at the same time, that dog appeared at our door (as long as he lived), but he never paid us a visit at any other time. He belonged to a chemist living in the High Street, and why he should single out our house for quietness on that noisy night we never could find out.

M. R.

A SELBORNIAN ANIMAL PAINTER.

IT must be nearly forty years ago that three small boys of Selbornian instincts found their keenest enjoyment in looking at books illustrated by two artists to whom one, at least, of the boys has ever since been grateful. The artists were Harrison Weir and Joseph Wolf—both of them, happily, still with us, and the former, at any rate, a staunch supporter of the Selborne Society; and the boy is the writer of this notice. When *The Life of Joseph Wolf* * came into his hands his first feeling was of regret that one whose books had delighted his boyhood as well as his later life had been taken from us; and it was with keen satisfaction he found that, although born in 1820, Joseph Wolf was still hale and hearty, and still at work, in his studio at Primrose Hill.

Different in treatment as is the work of Wolf and Weir, there is no need to draw an invidious comparison between the two artists, for each in his way is excellent, and we can equally enjoy both. But it is satisfactory to know that each of them, in addition to the skill of the artist, possesses a true sympathy and affection for the subjects of his pencil. "The best aspect of Wolf's work," says one of his critics, "is his power of representing the pathetic side of animal life, in which he shows his sympathy for the suffering bird or beast." And yet, as Mr. Charles Whymper has said, "although a true lover of animals, he never commits that folly of trying to make them other than what they are—'beasts of the field.' A large section of the public, reared in pictures of pet dogs with interesting faces as like man's as possible, and noble stags and eagles of conventional beauty, do not, therefore, all at once see the charm of his completely natural animals. But the verdict of every single naturalist and sportsman is that no pictures of wild animal life could possibly be better and truer."

As a schoolboy in Rhenish Prussia, Wolf early showed that sympathy with animals to which reference has been made. We find him fighting his schoolfellows for torturing a nest of young birds. He began to draw almost as soon as he could hold a pencil, and soon knew the habits of every bird in the district. "At the sight of a strange bird, or the sound of an unknown note, he would be off, regardless of time or place." And the animals in turn recognised in Wolf a friend. "They seemed to understand that he did not thirst for their blood, but merely wished to know all about them. His patience and gentleness of disposition may have had something to do with this, besides a certain skill in the language which every animal uses in its intercourse with an especial human friend, in those rare cases where it finds itself understood."

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* *The Life of Joseph Wolf, Animal Painter*, by A. H. Palmer. Illustrated. London: Longmans. Price One Guinea.

When he was sixteen, Wolf was apprenticed to a firm of lithographers at Coblenz, and here he stayed for three years. By the time he returned home he was an accomplished draughtsman. A little later we find him at Darmstadt, where he attracted the notice of the director of the museum, and from that time his career in life was fixed.

In 1848 Wolf came to London, and at once began his work on Gray's *Genera of Birds.* Ever since he has been fully employed, as the excellent bibliography prepared by Mr. Palmer shows, and the number of charming illustrations with which his *Life* is crowded abundantly manifests. The one which by the courtesy of the publishers we are enabled to give

is by no means among the best, but its history renders it peculiarly suitable for reproduction in these pages. Wolf severely censured the slaughter which made the reputation of hunters of the Gordon Cumming type. "One day, when he felt particularly angry, he caught up a bit of charcoal and made the sketch. It was intended as a kind of counterblast or protest against the popular notion of sport, and the general tendency of Cumming's anecdotes. These are the words in which Wolf imagines that writer would have described the incident:—'On coming into the neighbourhood of our waggons, our dogs gave tongue in a clump of bushes. I walked on, and there was a savage lioness! I knocked her over with my first barrel, and then I found that she had cubs, which were instantly torn to pieces and greedily devoured by our hungry dogs.'"

The following opinion will be warmly endorsed by Selbornians, and might even be taken as a qualification of certain statements as to the connection between "sport" and love of nature, made at the recent Annual Meeting of the Society for the Protection of Birds.

> Wolf not only thinks an innate craving for sport and the insatiable desire to kill, a relic of a savage condition out of keeping with the exalted culture and civilization we claim, but he girds at the superficial character of the average sportsman's knowledge of animals. He says, "They have no *desire* to know about a thing; their only desire is to kill it." He fairly boils over at the acts of indiscriminate big-game shooting, either to feed the enormous retinue of the wealthy sportsman, or worse still, when hundreds of magnificent beasts are left to rot, and still shot down, till species after species is exterminated. The man who sports in this way he compares unfavourably with a marten-cat in a hen-house, who kills on till there is nothing left alive. Touching a young man who was about to betake himself on a "shooting trip" to Africa, he growled when he was gone, "I hope that when they have to go somewhere by boat, a hippopotamus will upset them, and that they will have to swim ashore, leaving all their rifles at the bottom of the Zambesi." He goes even further than detestation of sport, and refuses to believe many of the stories touching the innate ferocity of certain species, and of their unprovoked attacks. Of man's unprovoked attacks on certain species he learnt a notable instance from Mr. Bartlett, who told him that sailors have been known to land on islands densely peopled with penguins; to kill or stun a sufficient quantity with sticks; and then to set fire to their oily bodies, 'for a lark.' He says, "When a schoolboy has an unfortunate owl in his power, turning its eyes upon him in fear of death, he takes it for ferocity, and stones the bird."

Space will not allow us to cite any of the passages showing the terms on which Wolf lives with the birds in his aviaries, or of the interesting details of his life. For this and for much more, and above all for the most admirable series of reproductions which ever illustrated the work of an artist, we must refer our readers to the book itself. When they have read it, and studied the excellent portrait which stands as its frontispiece, they will know more than they have hitherto done of this Selbornian animal-painter, and appreciate, even more fully than before, his careful and artistic work.

A PLEA FOR LIBERTY.

I WAS much interested to find from NATURE NOTES for last November, that the Prefecture of Police in Paris had enforced by stringent measures the law for the Protection of Wild Birds useful to agriculturists. I did not know that such a law existed in France, and I should feel very grateful for any information on the subject.

Since I stayed in Paris last winter, I have often thought of the many bird-fanciers' establishments which then attracted my attention, and which struck me as being unusually numerous. As I read this notice I wondered if the law, which has set free so many little captives in the Bois de Vincennes, prohibited at the same time the wanton destruction of robins, finches, wrens, and other small birds for the daily markets. Unless this be so, these birds must, in a short time, surely become extinct. But although we English people may look with horror at this daily massacre of little songsters abroad, and flatter ourselves with the thought that our fields will always echo with the song of lark and linnet, we have only to take a walk in the neighbourhood of Seven Dials, and we shall see almost as many bird-fanciers' shops as in Paris. May we not, therefore, follow the example that has been so ably set in France, and try and get a law passed which will set at liberty those birds as useful to our agriculturists as to those in France. This is surely a question which the Selborne Society might take up, and, as someone has already remarked, "now is the time to set about it."

I must own at the same time, however, that I am a great lover of birds, and all my life have loved to keep several pets confined in cages, and I cannot say what a pleasure this has been to me; but there have been occasions when I have looked in a bird-fancier's window, and seen there the many little lives wearing themselves out in the tiniest of cages, or rather *boxes*, that I have felt how willingly would I give up my own pet birds were such a law passed as would free these little captives in the streets.

One may argue that these caged birds give unlimited pleasure to hundreds of people who are unable to hear the song of lark or blackbird in their natural state, and I admit there is much to be said on their side. At the same time, it is possible for anyone living in London to walk through some of the many gardens and parks, and listen to the songs of the birds who there enjoy their liberty and who are yearly increasing in numbers. In any case, when it actually came to the point, a true lover of birds would hardly let the pleasure of keeping a few caged birds stand in the way of the liberty of the many thousands that we see imprisoned in those terrible little boxes in a bird-fancier's window.

I fear, however, that this plea for caged birds would not in itself be of sufficient merit to allow the Selborne Society to urge

that a law, similar to that so successfully enforced in Paris, be passed in London; but combined with one for the benefit of agriculturists, it might perhaps be a question worth considering.

A BIRD LOVER.

[The following extract from a recent *Daily Chronicle* seems to show that we have small cause to flatter ourselves in the way our correspondent suggests:—"During the past few years the annual supply of larks for London, from the Dunstable neighbourhood of Bedfordshire, has averaged between 48,000 and 49,000. It is stated that the supply is gradually diminishing."—ED. *N.N.*]

AN INTRODUCTION TO ZOOLOGY.*

THIS little book, containing 380 pages or thereabouts, and 124 good figures in the text, is intended primarily for the use of students drawn from the classes of commercial men, clerks, and well-educated artizans, who may be anxious for the purpose of self-education to acquire, in a small compass, and for a moderate sum, a clearly written and at the same time thoroughly up-to-date account of the elementary principles of zoology. Those who wish to extend their studies after mastering the details contained in this volume, will find at the end of it a special chapter recommending the best books, beginning with the most elementary, and passing on to those that are more advanced, so that there may be no waste of time and money over antiquated volumes. Amongst the periodicals mentioned as containing paragraphs of interest to lovers of animals, we are glad to see that NATURE NOTES finds a place.

Omitting part iii., which contains the information respecting bibliography, as well as much practical advice to students, the subject matter is divided into two sections, each containing ten chapters. The first section treats of the science from what may be termed its philosophical side, and discusses the more abstruse questions connected with evolution, the cell and its structure, life and force, &c. For an elementary treatise, this part is uncommonly well done, and we only hope that our artisan student will not be frightened by finding that at the outset he has to grapple with such alarming words as *pœalothermous*, *karyokinesis*, *diploblastic*, &c. We can assure him that a little perseverance will soon show that these names, like all others, are merely "noise and smoke." The second section, set apart for systematic zoology, contains an abridged account of the morphology and classification of the animal kingdom. This is not by any means so well done, in all respects, as the first part, but we have no wish to fault find, and will merely point out that it is difficult in all cases to see the principle upon which the space has been allotted to the various groups. The extensive class of the Nemathelminthes, or thread-worms, for example, is dismissed in three lines, while no less than a page and a-half is devoted in the first part to such a relatively unimportant matter as the history of the rise and fall of the manx-cat.

On the whole, however, this is a book which we can cordially recommend, not only to beginners, but also to advanced students.

R. P.

Mummy Wheat Outdone.—This is from the *Sun:* the mummy must have come from Mexico—at any rate the dahlia did! "Some little time ago a mummy, which was proved to be more than two thousand years old, was discovered, grasping in its closed hand a bulbous root. The root was planted in a sunny soil, and, after a few weeks, blossomed into a beautiful species of dahlia."

* *An Introduction to the Study of Zoology*, by B. Lindsay C.S. of Girton College, Cambridge. (London: Swan Sonnenschein, 1895. 8vo. Price 6s.)

SELBORNIANA.

The L.C.C. and Hampstead Heath.—Not content with the persistent neglect, to which we have more than once called attention, of the gardens under what is supposed to be its care, the London County Council is proceeding on its mischievous course. When Dulwich Park was being put into order, many unfavourable comments were published, on the ground that the natural features of the locality had been needlessly destroyed; but the London County Council had its defenders, and judgment was suspended. On the present occasion, however, the list of names, eminent in every department of art and literature as well as in other ways, attached to the petition which we reprint, is sufficient to convince every one that a gross outrage is being perpetrated upon all lovers of nature and of beauty. Hampstead Heath is one of London's most precious possessions, and it is nothing less than monstrous that it should be thus at the mercy of a muddling and meddling body like the London County Council. It will be time enough for the Council to turn their attention to Hampstead, when they have raised the Embankment Gardens to the level of those of a small French provincial town—a level of which at present they fall lamentably short.

The following is the text of the petition, which is signed by John E. Millais, P.R.A.: Hubert Herkomer, Vice-P.R.W.S.: James D. Linton, P.R.I.P.W.C.: George Du Maurier: Walter Besant: Alfred Ainger: R. Norman Shaw, R.A.: C. Santley: Octavia Hill: James Martineau: Herbert Beerbohm Tree: George A. Fripp, R.W.S.: Hamo Thornycroft, R.A.: Rogers Field, M.Inst.C.E. "We, the undersigned artists and other admirers of the wild and picturesque beauty of Hampstead Heath, do most urgently petition the London County Council to put an *immediate and final* stop to some of the work now proceeding there—namely, the cutting and burning of the old gorse bushes, the filling of hollows in paths with sand taken from banks and knolls, the drying up of small ponds by throwing in ashes, mud, &c."

Serve Them Right!—"William Mobey and Charles Williams, of Bexley, Kent, were charged under a warrant before the Totnes County Bench yesterday morning with damaging Devonshire hedges. The evidence went to show that the prisoners were engaged with a horse and cart in the wholesale removal of ferns, about 5 cwt. of roots being found in an outhouse. Previous convictions were recorded, and the Bench inflicted fines, Mobey £5, and Williams 50s., together with the amount of damage. The money not being forthcoming, Mobey was sentenced to six weeks' hard labour, and Williams to one month."—*Westminster Gazette, January* 21.

[This will please our Ambleside correspondent who writes: "I wish something could be said on the subject of the wild ferns that are carried out of this district by the visitors every summer. The coach drivers have a practice of making up baskets for their passengers, while the latter get lunch in the hotels. I know of two coach routes on which this is done, and probably it is not all. It is useless to appeal to the men, since it is a matter of gain to them; it should be rather the public that should be appealed to not to take the ferns which, in nineteen cases out of twenty, do not live after removal."—ED. *N.N.*]

Fish and Light.—I shall be glad to know whether gold and silver fish suffer when in a bright artificial light. I saw some in a shallow bowl of water on a dinner table exposed to bright gas light and heat.

E. C. S.

Furs.—Some of my friends are desirous to know what furs may be bought without fear of extirpating rare animals, and without cruelty in the manner of slaughter; the last point being of primary importance. If you can supply a list of furs to be used, or to be specially avoided, I should be grateful.

LAURA MARY FORSTER.

"Sent for Preservation!"—This is how the Bedfordshire folk encourage the visits of rare birds to their county:—"Within the past fortnight a number of very rare birds have been shot in various parts of Bedfordshire. A pied variety of

the moorhen was shot near Felmersham Grange. A female specimen of the great buzzard hawk, four feet two inches in expanse of wing, was trapped in Melchbourne Wood; while a fine specimen of the peregrine falcon was shot in the same locality, both birds being rare in England. Two Norwegian short ear owls have been killed at Thurleigh, and upwards of a dozen beautiful green woodpeckers have also been captured. The remains of these birds have been sent to Bedford for preservation."—*Standard, February* 20.

The Rixton (Warrington) people are equally enlightened; we are glad "one man" has something whereby to remember his exploit. "Whilst some men were employed on the canal at Rixton, they noticed a bird of unusual size hovering about. A gun was procured, and one of the men was fortunate enough to shoot it. A rush was immediately made for it, and whilst one man was in the act of picking it up, the bird implanted its claws in his leg, and great difficulty was experienced in extricating them. The bird was eventually killed, and proved to be a buzzard. It has since been stuffed."

Cats and Birds (NATURE NOTES, 1895, p. 197).—I see that M. C. B. inquires how to break cats not to touch birds. First obtain a kitten from a good hunting strain—a male for preference, as females of all classes are inclined to be changeable. The more game the kitten is, the better the chance of training him. If possible, when quite young, keep him in a room full of birds (of course, in cages); turn him in when just able to walk. In a short time he will get to know the birds and they him. Of course, he will want checking as he grows older if he shows too great an interest in the birds; it should be done gently, but firmly, without cruelty. I have a cat now, trained in this way, and I can with safety turn him into the bird room and leave him there all night; the room contains canaries, bullfinches, linnets, siskins, &c., &c. He will not touch a bird, but woe betide any rat or mouse that comes into the room. He will sometimes catch a sparrow, but very rarely. My birds seem to know my cat from any other animal, as they show signs of fright if a dog goes into the room, but when the cat is there they take no notice of him. I have even seen a canary feeding her young when the cat has been asleep not a foot from the cage.

J. W. H.

A Rook Query.—What foundation is there for the statement that it is absolutely necessary to shoot a certain number of rooks every year, in order to preserve a rookery at all? I am told that rooks are in the habit of slaughtering their own young, as soon as they cease to be quite dependent, hence the necessity of killing off the parent birds, just at that time.

A. P.

Feather Pictures.—I have seen "Pictures of Birds done with real Feathers"—as the notice says. The pictures are not painted but "feathered," if I may say so. The birds are, apparently, drawn in outline and then a number of small feathers of various colours are gummed or pasted one upon the other. The effect, no doubt, is pleasing to those people who do not give one thought as to how or from whence the feathers came; but to those who reflect how this effect was attained, it seems a most cruel way of pourtraying birds. If this way of picturing birds is to become common, we may, in a short time, look for the extermination of other species besides those which are demanded for ornament and decoration.

Hampstead. B. W. M.

NATURAL HISTORY NOTES AND QUERIES.

London Birds.—When speaking (p. 31) of the gulls on the Thames Mr. Macpherson says nothing of the lesser blackback. This gull may be seen quite as often as the common gull or kittiwake, and I have watched it with great pleasure on many occasions off Blackfriars and Lambeth. The great blackback I have never had the good fortune to catch sight of, although since Mr. Macpherson mentioned having seen it in 1894 I have kept a most diligent outlook; but it still remains a treat in store. Battersea Park I now consider to be a better hunting

ground for wild birds than the West End parks. Many species only occasionally to be seen in Kensington Gardens, stay all the summer in Battersea Park, and in some instances breed there, such as the reed warbler. Both the whitethroats, particularly the lesser, can generally be seen and heard as well as the willow warbler, while a summer never passes without the chiff-chaff, blackcap, garden sedge, and more rarely the wood warbler, putting in an occasional appearance. If the pied wagtail does not breed there, and I have never seen newly fledged youngsters, it is to be seen off and on at all seasons down by the river shore adjoining the park. Several years ago I believe it bred near the Magazine in Hyde Park, because for several mornings I saw a pair feeding a young brood able to fly, in that vicinity. Redstarts are not often to be seen at Battersea, and I have only noticed a solitary hen bird on one or two occasions, and curiously enough, all those I have seen in the West End parks have been cocks. With regard to the dabchicks in St. James's Park, a keeper told me he did not think they were really wild; still, the fact that they disappear for the greater part of the winter seems to point to the conclusion that they are. I once saw a black-headed gull making repeated stoops at one in St. James's Park, with very indifferent success from the dabchick's well-known diving powers. The attack was quite inexplicable to me, but a friend of mine told me he saw one of these gulls recently in the same place catch a sparrow and literally tear it to pieces. It is curious to note how the gulls now in St. James's Park (Feb. 8) keep to that part of the lake lying between the bridge and the Horse Guards, and I have observed the same partiality in previous years. Not a gull is to be seen on the other half of the water, and there the ducks reign supreme to their great content. Visits of the cuckoo to London must always remain doubtful unless the bird itself happens to be seen by some competent observer. I thought I heard it one May morning in Battersea Park, and on asking a gardener working close by whether he considered it genuine he replied, "Oh, yes, it has been about here all the week, and last year it had a nest here!" I never consulted that authority again. Greenfinches are often numerous, and I should never be surprised to find it breeding in the park. The lesser redpoll, linnet, goldcrest, tern, and in hard weather the redwing are only occasional visitors.

W. N. Rushen.

Blindness in Horses.—A few weeks ago a cab proprietor in Bristol, whom I have known and employed for years, told me of a blind horse in his possession that had always a thick coat of hair in summer and a thin one in winter, and said this was no exceptional thing, for he had had another blind horse showing the same peculiarity. I have since tried to obtain confirmation of what seemed to me a remarkable phenomenon, telling all my friends about it. One of them remarked, "Oh! that is an Australian horse, he has not yet got acclimatized."

But a few days ago I was sitting beside the driver of the Dartmouth and Kingsbridge coach, and he said at once, "We had a blind horse in our stable that I well remember, and had to clip him two or three times in the summer time." He further added, that it is necessary that the animal be born blind; it is not sufficient that he become so from an accident. He also said that his horse was not quite blind, but could distinguish a hand waved in front of his eyes. In this, however, he may have been mistaken, for we know how the other senses of blind individuals become sharpened, as instanced in the case of a man I was recently conversing with, that had become blind from lifting heavy weights, who, though stone-blind, can tell as he walks along the pavement when he is drawing near to a lamp-post.

How the connection between blindness in animals and an abnormal state of the covering of their bodies is to be explained I cannot tell. Perhaps some of your readers can throw light on the subject.

Slapton, Kingsbridge. Giles A. Daubeny.

Bats (p. 227).—The account of the bat's slow awakening reminded me of some dormice I kept long ago. During the winter I kept them too warm to allow prolonged hibernation. When wishing to wake them I held the little, cold, stiff ball in my hands, and exactly the same process of re-animation took place as that described in the case of the bats.

E. G. W.

A Carnivorous Millipede.—On p. 12 of last month's NATURE NOTES occurs the sentence—"The millipedes, on the contrary, are sluggish vegetarians, with hard, cylindrical bodies," &c. Some time ago my attention was attracted to a large earthworm, writhing and twisting about on the garden path, as though in pain, or through having received some injury. On examining it more closely to ascertain the cause of its unusual movements, I found that a millipede had fastened itself to the side of the worm, and appeared to be boring or eating its way into the body, whilst the most violent efforts on the part of the worm were ineffectual in shaking off its antagonist. If the millipede is a vegetarian, what could be its object in attacking so harmless and defenceless a creature as the earthworm? The above, which I take to be a millipede, is the black or dark-coloured creature "with hard, cylindrical body" ordinarily found coiled up in a spiral, under stones or rubbish.

W.

[We have submitted your question to the competent authority whose review you quote; he kindly writes as follows:—"If there is no mistake about the identity of the aggressor in the account cited above, the observation is one of considerable interest; for so far as we are aware it is the only case on record of a millipede being guilty of such conduct. But were it not for the positive statement that the species was the dark-coloured creature with a hard, cylindrical body, which is ordinarily found coiled up in a spiral under stones or rubbish—a description which exactly applies to the millipedes of the genus *Iulus*—we should have concluded without hesitation that the struggle in question was merely one of those that habitually takes place between the centipedes of the genera *Lithobius* or *Geophilus* and the earthworms upon which they feed."—ED. *N. N.*]

Birds and Squirrels.—My observations with regard to birds and squirrels lead me to think it is the association of sounds with danger which causes alarm. Squirrels certainly are specially afraid of the human voice. I have seen one coming at full canter to my window, which they frequent for nuts, and stop dead short eight or ten yards off, because a lady in the room behind me spoke in her natural voice, though the window was shut. The squirrel stood up and listened eagerly on the path, and finally returned to its tree. I have often watched them come to the window, and though they hesitate and listen and look carefully before they start, I have never before seen one pause when once the start was made. As I have two dogs I think the squirrels specially rush the journey between their tree and the window for fear of their enemies appearing on the scene; when once at the window they are safe, as they can run all over the house by means of the creepers. These same squirrels do not mind the noise of coals being put on, or of the door being opened, though the sight of some one coming in at the door sometimes frightens them. They are getting used to my voice, and I frequently stand close to the window whilst they are on the sill and talk to them, and they turn round and look at me and try to take nuts out of my hand through the glass. I fear they are much hunted by boys, and even men, in this neighbourhood, and they are liable to have their nests robbed as well as to be stoned to death, both of which terrors are associated with the human voice. They certainly are much more afraid of strangers at a distance which would allow of stoning, than close at hand; no one can come near them in the garden, and if looked at twenty or thirty yards off, they will run up a tree and hide, but they will sit on a raised window sill, entirely exposed to view, for ten minutes at a time, eating coco-nut, whilst a stranger sits at a writing table close to the window, not a yard from the sill. I think in the same way birds associate the report of the gun with danger, but do not associate the human voice with it, men who shoot and boys who birds-nest being habitually silent when so occupied. Birds and squirrels both fear being looked at steadily, and before they are tame, can be approached much more easily at the window if one's head is turned another way whilst moving towards them.

L. M. FORSTER.

Birds and Windows (p. 39).—Birds do see through glass. My father always fed the birds regularly several times a day. He had only to go to the window upstairs or down, when immediately a cloud of sparrows would descend and alight in expectation of his bounty. If he looked out of the window upstairs they perched on the verandah, if downstairs they flew on to the turf bank before the window of the sitting room, always ready for their meal; the sight of his venerable

head, with its snow white hair seen through the glass, drew them at once to the spot. Quite recently I have often observed a beautiful wild magpie fly up to a library window of plate glass, which is kept closed. The magpie flies into a large apple tree, some little distance off, perches there for a few moments, squawks, flirts its magnificent tail, then flies gently under the verandah to the window, where it flies up and down, seemingly desirous to enter the room if it could. Defeated, it returns to the tree, where it ejaculates as before, and then, apparently not liking to be foiled, flies back to the window. It repeats this three times or so, finally it goes off in disgust. There is nothing in the room to attract it. I can only account for the action of the bird by supposing that it sees the reflection of the trees outside, in the plate glass, and perhaps its own image. But it must see through the glass, as it goes so gently to it, and flutters up and down, which shows that it is aware that it cannot pass through it.

Carisbrooke, I. W. E. PRICE SAYER.

I have good opportunities for experiments on this subject, for I have a daily breakfast party, consisting of some dozens of rooks and starlings, with now and then a jackdaw or two, and of course any number of sparrows, who come uninvited. After spreading the usual repast, I waited for the guests to assemble, which did not take long. I then stood close to an adjoining plate glass window, within a few feet of the birds. They took no notice of me at all, till I waved a handkerchief, and then at once they flew away. This was repeated twice. Then I made loud discordant noises, which produced no effect on them. So it seems to me that the theories advanced are at least partially founded on fact.

Folkestone. A. L. HUSSEY.

Nightingale near London.—How near London could I depend on hearing a nightingale, if I came up for that purpose?

Southport. J. HUDSWORTH.

TO CORRESPONDENTS.

Mildness of the Season.—This is so patent a fact that we do not think it necessary to publish the various communications we have received on the subject.

A. P.—Mr. Pedder's paper in this number answers one of your questions.

Strathmore.—Both items are quite familiar.

Cetrach.—We have no control over the advertisement portion of NATURE NOTES.

Newspaper Cuttings.—Correspondents sending these are requested to give the name and date of the paper; when the paper itself is sent, the passage to which attention is called should be marked.

L. M. F. and others.—Please read Rule 5.

Erratum.—The figure called *Didymium effusum* on p. 30 is *Physarum nutans*.

WE must request those who favour us with their communications to observe the following rules. We cannot undertake to notice the contributions of any who fail to comply with them.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

National Society for Checking the Abuse of Public Advertising.—The Annual Meeting was held at the rooms of the Society of Arts, John Street, Adelphi, on Friday, January 31. Mr. F. W. Ashley, F.Z.S., attended as a deputation from the Selborne Society.

New Branch.—The Council hears with pleasure of the probable formation of a new branch in the neighbourhood of Lower Rickinghall, Diss. Members and friends willing to assist are requested to communicate with the Rev. G. Hales, The Rectory, Lower Rickinghall.

Field Club Saturday Rambles.—The first ramble of the season will take place at Chingford and the neighbourhood on April 11. A visit will be paid to the Essex Field Club Museum. Further particulars will appear next month.

Council and Committee Meetings.—The next meetings of the Council will be held on March 5, and April 2, at 5.30; of the Conversazione Committee on March 5, at 6.30; of the Magazine and Leaflet Committee on March 19, and April 16, at 5.30; of the Field Club Committee on March 19, and April 16, at 6.30.

BRANCH CONTRIBUTIONS.

Halifax	£0	7	6½
Kensington	2	3	2
Northern Heights	2	3	0
Rape of Lewes	0	11	11
Selborne and Liphook	0	18	10
Weald of Kent	0	9	6
Wimbledon and Putney	3	0	0

NEWS FROM THE BRANCHES.

Abinger and Shere.—A popular lecture was given by Mr. A. P. Wire on February 12, at the Abinger Hammer Schoolroom, on "The Sagacity of Animals." The lecture was illustrated by means of the magic lantern, and was much appreciated by those present. There was a good attendance.

Birmingham.—The Annual Meeting of this Branch was held last month in the Council House, the Mayor (Councillor James Smith) presiding. There were also present Alderman Johnson, Councillor Martineau, Professor Hillhouse, Professor Windle, Messrs. A. W. Wills and Oliver. The Annual Report stated that there had been in the past year a slight increase of membership. Prizes had been offered in the town for essays on Selbornian subjects. There was a balance in hand at the beginning of the year of £17 15s. 2d. Speeches were delivered by the Mayor, Councillor Martineau, Mr. Oliver and others. On the motion of Professor Windle, the Mayor was elected President, and Messrs. Priestley Smith and A. W. Wills, Vice-Presidents of the branch. The Hon. Treasurer, Mrs. C. Dixon, and the Hon. Sec., Miss D. C. Sturge, were re-elected to their respective offices.

Croydon and Norwood.—A "Museum Evening" was held at Seneca Hall on March 20, a large number of interesting objects being exhibited by members and their friends. Short addresses were given by the Rev. F. E. J. Bird, one of the Vice-Presidents, and by the Hon. Secretary. Amongst those who kindly sent specimens were Messrs. F. Downing (delegate to the Central Council), H. Perry, King, Rawlings, Perks, Gude, A. Wright, Ward Adency, Long, and Putnam. A most enjoyable evening was spent.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

No. 76. APRIL, 1896. Vol. VII.

THE SPOILING OF HAMPSTEAD HEATH.

LAST month we printed the memorial address to the London County Council by a representative body of artists, authors, architects, and philanthropists, on behalf of the preservation of Hampstead Heath. The subject is one so intimately connected with the objects of the Selborne Society that we propose to deal with it at somewhat greater length.

The London County Council, whose action is impugned, does not appear to think the matter one of importance; it has not been fully discussed at the meetings of that body, and the Easter holidays will probably intervene before any further attention can be given to it. Meanwhile, the *Daily Chronicle*—the champion of the L.C.C. in the London daily press—and Mr. J. S. Fletcher, the Chairman of the Parks Committee, have come forward in defence of the Council. The *Chronicle*, however, soon withdrew its protection. Its plea that "even the London County Council ought not to be hanged before it has been heard in its defence" is met by a correspondent who says:—

> How can it defend the gratuitous planting that has been going on to the east of the Broad Walk at Hampstead? The trees are not wanted there. They will shut out the view and the air and the sun, if they grow, besides spoiling a pleasant bit of rough open ground. And if they die, which is much more likely, for the situation is too exposed for trees to thrive, and the holes in which they have been stuck have been filled with something more like rubble than good earth, the wire-netting and the prop and the dead tree will not be exactly beautiful objects, in spite of the symmetrical planting. It is a thousand pities that the Council should go in for landscape gardening on the heath.

This letter appeared on March 7, and three days later we find in the *Chronicle* the following paragraph:—

We hear that a petition to the County Council praying for the better treatment of Hampstead Heath is being largely signed. It is to be hoped that the petitioners will insist upon the immediate removal of the obnoxious trees on the summit of the East Heath, which are such an eyesore. A local vigilance committee is also to be formed in order to keep in check, of course by constitutional means, the lamentable outbreak of landscape-gardening which has already gone so far to deface the Heath.

In the last sentence we have one explanation of the mischief that has been done. The Chief Officer of the Parks Department probably wishes to emulate on Hampstead Heath the triumphs he has achieved at Brockwell Park, to which a strip of land, about a quarter of a mile long and varying from fifty to a hundred yards in width, has recently been added. "This narrow strip"—we quote from the *Chronicle* of March 16—"would hardly be expected to give much scope for the 'landscape gardener'; but Colonel Sexby, Chief Officer of the Parks Department, has almost made it romantic. A small stream, the overflow of the old bathing-pond, runs through it, and has given Colonel Sexby opportunity for a masterpiece of rustic bridge, tiny lakes, winding banks, and murmuring cascades. The last named number sixteen." Sixteen murmuring cascades, tiny lakes (number not stated), winding banks, and a rustic bridge—all within a quarter of a mile of ground, at most a hundred yards in width! As contrasted with these charms, it is no wonder that the Heath, although it might suit the unformed taste of a Constable, a Linnell, or a Cotman, should appear unkempt to Colonel Sexby, and that he should be endeavouring to make Hampstead as "romantic" as Brockwell.

We are indebted to a correspondent for the following account of what has been taking place on the Heath since the County Council took it in hand:—

We live close to the Heath, and are in the habit of walking over it daily. We have seen from the beginning that the London County Council's officials wished to turn it into a park, but they have never proceeded to defy public opinion as they are doing at present. On the east side of the old Heath a band of workmen have been employed for months, levelling the beautiful silver and brown sand hills, for which that part was so loved by artists (including Constable, Linnell, Müller, and Cotman). The hills being cut down and their tops thrown into hollows, round holes have been dug at equal distances, black garden mould put in, and many hundreds of little trees planted in them with stakes, wire netting, manure, &c. They have brought these trees quite up to the edge of the Spaniards Road, blocking out the world-renowned view of St. Paul's and London. These trees are planted thickly the whole way from Jack Straw's Castle to the end of that part of the Heath.

On the other side (the left hand of Spaniards Road) there was the most beautiful part, full of gorse, broom and other wild growths. Here five men with billhooks have been clearing for weeks, each day lighting a large fire and burning piles of cut down gorse. This gorse they call *dead*. It was not so. I and many others stood by and saw them cut branches thicker than an arm and sprouting with green all the length of the bough. They call this *pruning*, but the obvious intention is to clear this part also, and then to plant their little nurseryman's garden trees. The part beyond the sandy road we used to call Heatherland; it was a blaze of purple. Now you must look about for a patch of bloom as big as a handkerchief. The bog on the West Heath has always been celebrated for rare flowers—sundew, &c. It was drained by the Metropolitan Board; the rare flowers are gone.

On the East Heath there was a little pond under some oak trees (the Rat Pond where the children used to get tittlebats. This is dried up by the officials. On the further West Heath several other little ponds have been dried also. The yellow water-lily grew in the Viaduct Pond. They dried the pond to clean it, leaving the lily roots for days on the bank in the sun. That is dead. Natural sand paths are cut straight with line and spade, and remade with cinders or red brick. Little gullies made by the rain are filled up with sand or clay, flattened by spades. They are "dangerous," the men say. Hollows filled with long grasses, hare bells and sorrel are cut with a scythe.

Nothing but an authorized committee of taste can save the Heath.

Mr. Fletcher's defence, delivered before the Hampstead Vestry, is published in the *Hampstead and Highgate Express* for March 14. It seems to have satisfied the Vestry, who did not press a resolution which had been presented, censuring the London County Council; but it appears to us somewhat difficult to reconcile with the account we have printed. He speaks of a "rain pool formed after wet weather" which was filled up by "an official with more zeal than discretion"; but the "rain pool" is a pond which has been there as long as residents can remember, has been painted by dozens of artists, and rushes —which do not grow up in a night in "rain pools,"—still remain; and why has the pond not been dug out again? "The labourers took sand from a bank," and Mr. Fletcher, when his attention was called to this, stopped it, but not until they had been carting it for a whole day. As to the gorse, we allow there is room for difference of opinion, but the facts already mentioned do not inspire us with confidence in the action of the London County Council's workmen. As to the roots of the "fine row of elms"—does not Mr. Fletcher know an elm from a lime?—which are becoming exposed, why are they not covered up? and were they ever protected by gorse, as Mr. Fletcher suggests?

"With regard to the trees planted on the East Heath, the Council, after five years' deliberation, approved a scheme of planting, which has just been completed, in order to replace the old trees which are rapidly decaying." Our correspondent's statement already given must be taken in connection with this justification; it is added, "If Mr. Fletcher ever saw one tree on the sand-hills where he is planting hundreds, he must be five hundred years old! Trees could not grow there in bare silver sand. It is no 'replacing,' but absolute ruin." Mr. Fletcher blandly says, "If the public will allow the trees to remain the Council will consider the subject from time to time, and then cut the trees in places where it is found desirable." We hope the public will *not* "allow them to remain," but will carry out the advice of the *Daily Chronicle*—"the immediate removal of these obnoxious trees should be insisted on."

Space will not allow us to discuss the matter further; but one question must be asked. Who is responsible for these alterations—say, for the filling up of the pond, which Mr. Fletcher reprimanded, and the taking of sand from a bank,

which was stopped by his orders? Who planted the "obnoxious trees"? Do the workmen act on their own initiative? If so, why is the Heath left to their fancies: if not, who gives them their instructions?

It must not be supposed that in making these remarks we are actuated by any feeling of unfriendliness towards the London County Council. We gladly admit that in many quarters—*e.g.*, Battersea Park, though exception may be taken to the keeping of birds in cages there—they have done much to increase the enjoyment of the public. But Hampstead Heath is not an artificial park, and must not be treated as such. If the London County Council likes to delight itself by making murmuring cascades (to the number of sixteen), tiny lakes, and rustic bridges in a newly acquired strip of land, it seems hard to grudge them an amusement in which even the gutter urchins are enabled to indulge after a heavy shower of rain, materially aided in their sport by the thoughtful kindness of the vestries, who carefully stop up the water channels with mud heaps during any rainy period. It might be contended that the money spent in laking and cascading would be better expended on the Embankment Gardens; but that is a detail. It should, however, be made clear that when Colonel Sexby wants to play at landscape gardening, he must select some place other than Hampstead Heath for indulging in the amusement.

THE EDITOR.

BIRDS—YOUNG AND OLD.

IT was on a hot afternoon in June last year, when red roses were clustering over the lattice work, that I watched a hen-chaffinch perching by a full-blown rose; bending towards it, she dipped her beak into its midst, with no intent, however, of inhaling the sweetness, for she drew out a fat green caterpillar, and flew off with it to her nest in a tree. Her mate had already brought one of the young ones to display to me, and soon after this the brood was safely out. Young chaffinches were later last year than I ever remember, owing to the delay in building consequent on the long frost. But every day in the end of June brought more young birds about, till the air was full of infantine chirpings, amongst which it was easy to distinguish that peculiar chirruping which proclaims the fact that another young chaffinch has achieved the art of swallowing. They were all around us—young chaffinches opening wide their beaks, and parent birds stuffing down the inexperienced

* From notes taken in the summer of 1895.

throats, seeds, crumbs or caterpillars, as the case might be, the young birds looking like innocent balls of fluff. So far as my observations go, young chaffinches are the only young birds who "wobble" from side to side when being fed; and when begging for more they confront their parents with this ridiculous movement. A friend, unaccustomed to the ways of birds, called to me to look one day, saying, "Why, there's an intoxicated chaffinch!" The parent birds so far honour me as to leave one of the young ones near me sometimes while they make an excursion to the nest for a second detachment—anxious moments these! especially if a hawk is about. We often watch their first attempts at pecking and swallowing, and notice how weak the little necks are. When one remembers that food has hitherto been administered from above in the nest, the difficulties of picking from the ground are realised. Young chaffinches, swallows, martins, sparrows, and many others, are brought out for a short airing and then taken back to the nest. We have watched a family of martins packing themselves into the nest again, little heads peeping anxiously over the edge of the nest in anticipation of the next meal; and we have watched young chaffinches being escorted to their nests by the parent birds. As for sparrows—one would gladly shut eyes and ears to their existence, were that possible! Our once peaceful garden literally swarms with them. The sunshine of last summer seemed to be as favourable to their propagation as was the hot summer of 1893 for wasps, and one shudders at the thought of what future years may bring us!

Starlings and jackdaws can have no wish to return to their dark homes of infancy, when situated, as these so often are, in chimneys or in holes in eaves. Last season we listened to the crescendo chirps and screams of a family of starlings in a nest under the eaves, but did not see the flight into the world. Backwards and forwards through the hot days of early June flew the parent birds from the pasture land to the nest. Richard Jefferies describes it in *Meadow Thoughts* with a master touch:—"The starlings fly so swiftly and straight that they seem to leave a black line along the air. They have a nest in the roof, they are to and fro it and the meadow the entire day, from dawn till eve." After the young starlings had flown, we saw no more of them about the house. Perhaps they went to some happy hunting ground with the old birds. A pair of redstarts built in the ivied wall just under the starling's nest; every time the young ones were fed there was a sound as of the whirring of watch wheels running down. I noticed that both starlings and redstarts waited with caterpillars or grubs in their beaks, as though to warm them, or otherwise prepare them before giving them to the nestlings. When one observes the green caterpillar diet of young chaffinches and redstarts, and notices the numbers of snail shells broken up by thrushes, and the constant supply of grubs provided for their young by starlings, not to speak of the

attacks on grubs by rooks, the outpulling of worms by blackbirds and robins, the flies caught by swifts, swallows, martins and flycatchers, and tree insects by creepers, titmice and woodpeckers, one trembles to think of a birdless world, and appreciates the plague that the ignorant burgesses of Killingworth brought on themselves.

The growth of self-assertiveness in young jackdaws is most amusing. We watched one season the first flight of the young ones from the family chimney. I wish we could realize the sensations of the young birds, suddenly emerging as they do from darkness into light! The height seemed a dizzy one, to one at least of the party. The most adventurous spirit first tried his wings and flew to an opposite tree, then another followed, both escorted by parents and friends. One more timorous, probably the last hatched, waited "lingering, shivering on the brink." Backwards and forwards flew the old birds, whilst friends and relations squawked discordant encouragement. The black wings fluttered—not yet; back went the young bird to look longingly down the chimney at its nest, when a sudden shove from one of its parents made it stretch its wings by instinct, and once feeling the joy of flight, it flew across to the tree whither its brothers and sisters had preceded it. Deference to parents is short-lived in the jackdaw disposition. One morning, very early, hearing sounds of warfare, I looked out, fearing to see a bird tragedy. A few crumbs left over-night had been appropriated by a family of jackdaws. A young one, easily distinguishable by his black collar, turned on the parent bird, and, seizing him by the throat, shook him in his indignation because more food was not forthcoming! The unhappy parent shrieked, but the moment for leaving his unruly young was not yet come, so attempting no defence, he meekly went in search of more food, followed by the young ones, who pecked him and beat him with their wings. We are often angry with the jackdaw's behaviour to the smaller birds; after this we realise that even amongst birds "no doubt there's something strikes a balance!"

It chanced last year that I witnessed in two or three instances the moment when parent bird or young one realized that the time of dependence must end. A blackbird was feeding a young one on our lawn, when the ungrateful child, suddenly finding something for itself, at once turned and pecked the parent bird for offering it some morsel. The old bird opened wide its beak and hissed, then closing his beak he flew away, leaving the young one to its own devices. Young chaffinches, after they are able to feed themselves, occasionally resume their absurd habit of wobbling before their parents in the hopes of securing some dainty. I saw a chaffinch one day relent so far as to place a crumb on the young one's beak, then pointing his sharp beak at it, he darted off, having plainly given it to understand that for the future it must depend on its own exertions.

A young chaffinch that had somehow lost alike itself and its parents, once came to us for sustenance, and it was pathetic to see the little mite begging from one old bird after another; but none of the busy parents had anything to spare for the little orphan, and they flew away with their own families. Possibly young birds may not always know their own parents, but the parent birds evidently know their own young ones.

Last summer the robin who owns the best half of our lawn brought his family to see us; he himself flitted about among the plump chaffinches like a little spectre, thin with family cares, his once scarlet breast discoloured with scars of war, and his bright eyes nearly starting out of his head with anxiety. We noticed the hereditary instinct leading a young robin to watch the turning over of earth, almost before it could find for itself the delicacies hidden therein.

A family of blue tits is a charming sight; one day I heard buzzing, squeaking sounds proceeding from the thick foliage of a Spanish chestnut, and presently I saw a family party of blue tits, now heads, now tails up, parents and children equally "light of heart, and light of limb."

A thrush brought his young ones to feed on our lawn, a greenfinch brought his ill-behaved but good-looking family, and we watched a family of wagtails out insect-hunting for the first time; and the bird life goes on, with all its quarrels, jealousies, rivalries, loves and fears—a world of its own. Those of us who accept Nature as a teacher, and love the open air, cannot imagine ourselves without the unfailing interest of bird life. The affection we feel for those (sparrows excepted) who stay with us through the winter, deepens; the delight with which we welcome the migrants back to their summer homes is ever new; the joy of discovering a new friend does not detract in the least from the love we bear the old. Then the excitement of the nest-building, the feeding and bringing out of the young; and best of all, the joy of hearing the song of blackbird and thrush, the warble of the robin, the trill of the chaffinch, the twitter of the swallows. All these, and many more delights than we can name, are theirs who enter into the bird life around them; for without its song and merriment and grace, the most beautiful garden would have a want that no flower-colour or fragrance could supply.

HELEN J. ORMEROD.

Chagford.

NATURE PLEASURES IN A RIVERSIDE GARDEN.

IT is amazing to consider what delights a lover of Nature may derive from plant-life and bird-life, if encouraged, in even a very small garden. My own garden is but a little one that runs on one side, steeply down to the banks of the Thames, and has a still smaller piece on the other side, between the house and the road. Yet in the culture and tendance of this, my wife and I find many and varied delights which we are able to share, at times, with friends who come to visit us. The road-side portion, given over by our predecessors to dust and desolation, has been shaded and protected by a couple of plane trees and a small privet-hedge; and behind such protection we manage to grow here a central rockery of perennial ferns, including a fine royal-fern close to the front door; and a few side-beds of evening primroses (*Œnothera Lamarckiana*) the bursting forth of whose bright yellow flowers, as evening draws on, it is always a pleasure to watch; and whose seedlings, renewing fresh plants from year to year, make them as perennial as the ferns themselves. Over the area-rails we have trained a fine clematis (*C. alba magna*) whose large white flowers present, at times, a brilliant display as one walks up to the front door. Beside the pathway some perennial peas have yearly displayed their pretty flowers; and there are a few such modest plants as creeping jenny.

Up the front of the house we have managed to grow a self-clinging vine (*Ampelopsis tricuspidata*), which has now got past the bedroom windows; and, with the aid of a little wirework, we have, with difficulty, raised to the roof, on each side, a small white-flowered climber (*Clematis montana*), whose multitude of blooms make a remarkably fine and increasing show in early spring. This seems to promise to meet, in time, by further growth along some wirework, across the whole top of the house; and then it may, perhaps, rival the clematis that in May evokes the admiration of every visitor to Bonchurch Hill.

The riverside portion is given up mainly to the culture of roses, the tendance whereof, by budding and otherwise, requires much pleasant care, and whose flowers form a very pleasant show, and, when cut, always prove acceptable to flower-loving friends. Some of these roses we train along the tops of side-walls, or over arches, under which it is very pleasant to sit in the shade to have tea, or to read, or even to do various kinds of work; while two dear little canaries hang overhead and make the whole garden resound with their melody.

The river, at hand, furnishes various ever-present pleasures. At quiet times, fish leap out of the water, increasing in numbers with the increasing purity of the river: boats row or sail quietly past: and the to-and-fro movement of tides, that are ever varying in height and vigour, supplies a continuous interest. Now and

then a porpoise swims up with the tide; and its movement, well known on the sea, as a shoal passes across some bay, or round some headland, is apt to startle one as it passes close by your garden-door on a river. Once a seal came up; but the beautiful creature was received with such discourtesy that it turned to go down again, was followed by its persecutors, rose close to a following boat, and was mercilessly shot. The porpoises had been persecuted in like manner; but shot and rifle-balls seemed, fortunately, to have had no more effect on them than on an iron-clad, though a whole fleet of boats followed them on their course. In consequence of much public indignation, provoked by the slaughter, the Conservators of the Thames had the destroyers of the seal punished; but such ravages will not, it is to be feared, be checked unless the proper authorities make it widely known that such life is never to be wantonly destroyed.

The swans furnish much interest. Always ready to take pieces of bread, they will, at high tides, take it out of my hand: and I have even got them to walk some way up the garden. At other times, they come down gently with their cygnets, the mother-bird now and then bearing one of the family on her back, or again you may hear them making their peculiar utterances in flight as they pass along close to the surface of the water. But their most graceful attitude is when they slowly drift past, at eventide, into the glories of the sunset. Then they may well recall the words in which they are addressed by the poet:—

> "Day is dying; float, O swan, along the ruby river,
> Requiem chanting to the day; day, the mighty giver.
> Pierced with shafts of time he bleeds, melted rubies sending
> Through the river and the sky, earth and heaven blending.
> All the long-drawn earthy banks, up to cloudland lifting
> Slow between them drifts the swan, 'twixt two heavens drifting.
> Wings half open, like a flower inly deeper flushing;
> Neck and breast as virgin's pure, virgin proudly blushing."

At the river-end of the garden, in the coldest and shadiest place, some arctic moss brought for me in the *Lusitania* from Nova Zembla, had been planted, and seemed to be nicely growing when, a month later, there came some very heavy Thames floods, which drowned many up-river houses from Eton to Kingston, and laid these pretty mosses for six weeks under water.

The mention of swans brings up one of the most interesting kinds of life in the garden, its bird-life. In spring, the migrants find here their earliest way, and we often wonder whether a particular visitor, or a particular pair, may not have come to the same place several times, after spending the winter in Africa or some other distant region. From the bottom of the garden, we are pretty sure to see the first swallows hawking over the Thames for flies. And three times out of four, it is from across the river that we first hear its name sounded by that visitor whom Wordsworth wondered whether he should call a bird, or but a wandering voice. The favourite haunt of the cuckoo is among the trees

on the opposite bank of the Thames, whence it sallies forth to look out for nests wherein to deposit its eggs. One spring, a robin, that had built her nest in a box on the garden-wall, had her two eggs increased by a third, not much bigger, that must have been deposited by the cuckoo's *beak*, owing to the small size of the robin's hole in the box. But whether the robin had been previously imposed on by the cuckoo or not, I cannot tell: anyhow, the bird forsook this nest, built a nest in another box, and there reared her brood unimpeded. The swallows are fond of settling to sing their sweet but little-known songs on a neighbouring tree.

For many years a pair of starlings have built a nest on a nook of the roof that they seem to regard as their own. Very early in spring they come here to look up their nest: they look in at the window to greet me from a tree, while I am dressing; and often when I come home, they sing to me from a ledge, in the last rays of the dying day.

The spotted fly-catcher may be watched, for hours, sailing forth from a favourite perch to catch a fly in the air; and the whitethroats and other warblers may be surely found, at times, among the climbing roses. The nightingale I have heard here but rarely; and of late we have had to seek his note in a roadside copse a little way off. Thrushes (song-thrush and blackbird) sing here very beautifully; and nowhere can you trace in better form the song that Tennyson phrases thus in his pretty poem:

> "Summer is coming, summer is coming, I know it, I know it, I know it;
> Light again, leaf again, life again, love again: 'Yes, my wild little poet.'"

These song-birds spend the winter with us, many of them: and in a mild winter you may hear their song almost the whole year through. Last winter (1895-6), I heard the song-thrush singing beautifully from Christmas well into January, every day, and even up to and after dark in each day. The Tennysonian thrush-song you may hear burst forth all of a sudden, close to your head, from some thrush in the rose-bushes above.

In the winter-dwelling birds, as being always with us, we take, naturally, the deepest interest. In very severe weather, they are hard put to it to obtain any subsistence; and were it not for liberal aid gladly afforded, they would, in the very severe severe winter of 1894-5, nearly all have perished. In that very hard weather we had often good reason to inquire,—

> "Ilk happing bird, wee, helpless thing, that in the merry months of spring,
> Delighted me to hear thee sing, what comes of thee?
> Where wilt thou cower thy chittering wing, and close thy ee?"

The robin and the hedge-warbler, which usually sing the whole winter through, were silent then, and many died, in that hard winter. The birds that then fared best, and that, with us, always fare best, are the pretty little tits. Flocking in crowds to an old apple-tree, they always find there pieces of fat, half-picked bones, and coco-nuts hung up on long strings, for their

behalf; and their movements at these feeding places are always most interesting to observe. To these strings they will come, three or four kinds, in large numbers; and there they will perch, almost on each others' backs, flit from piece to piece, hang on anyhow, heads downward, be twisted around and blown about by the wind, and furnish, in their varied plumage, a mass of ever-enjoyable beauty. Last spring (1895) they built nests in the boxes, and there two kinds of tits reared their pretty little broods successfully. Just above one of the boxes some sparrows had long had their perennial building-place in the ivy; and one morning this contiguity of nests led to a fierce conflict. While the females were sitting on their eggs, there took place between the males a long contest for supremacy in the adjacent apple tree. The sparrow was the bigger bird, and looked likely to win; but the plucky little tit returned to the encounter again and again, undaunted, and at last secured the victory; after which struggle the birds seemed to have quite settled their disputes, and lived on as close neighbours quite amicably.

Through long continuance in the garden, and there raising their broods, a pair of robins have become quite familiar companions. When their young had been hatched, it was interesting to sit close under the box that contained the little robinets, and note with what assiduity the parent birds brought worms or some such soft food; with what care, before delivering the food, they watched to note if anybody was looking at them, and with what eagerness, after feeding the little ones in the box, they would fly away widely, as if they wanted to show that they were going into the next county. One spring the female robin was ailing; her husband was very tender to her, and tried to coax her with a bit of food. But, alas! she pined away and died: and then, for several days, the widowed bird went on singing rapturously all day long with hardly a moment's cessation, till, by such an outburst of song, he had secured another wife, who soon set up housekeeping with him in a neighbouring box. So far as we can make out, it is the female bird that has most to do with choosing the home and fashioning the nest, while the male does all the singing.

The robins are very pugnacious and very jealous, and will not tolerate a rival any way near their territory. The robinets are bright-eyed little birds, but, for a while, very feeble in flight, and apt to wander abroad too early, and thus to fall a prey to cats. Like other youngsters, the robinets seem eager to get off to see the world, and our chief anxiety about them is to keep them in the garden till they are able to fly strongly.

The sparrowlings are quite different birds, and do not come out till they are able to fly well. Then, in pleasant little family groups, they press round their parents, with much chirping and wing-fluttering, to take what these parents seem very ready to supply. In June and July, it is a pleasant sight to see the mother-bird bending down some slender rose-shoot and instruct-

ing her young ones how to gather therefrom the aphides that they love so much.

Against the voices of the birds that sing above or around them our canaries love to try their songs; and it is interesting to listen to the contest that goes on between one sweet singer under the roses, and another on or above them. But this singing is, of course, in joyous weather. In a severe winter, such as the one in 1894-5, when even the water-pipes laid deep underground were frozen, all birds are very hard-pressed to live anyhow. The gulls press up the Thames, dive down with eager clamour to seize pieces of food that may be thrown to them, and seem perhaps to fare best of all. The close-pressed rooks and jackdaws then sit watchfully on neighbouring trees, sail over the little garden wistfully, swoop down on other birds' food, and sometimes fly off with a piece in their claws. The thrushes and blackbirds, who charm us in summer with their songs, come in crowds to the old apple tree, fly up therefrom to gather in their beaks a ripe black ivy-berry, and eat it as we should some rich grape. And then, too, it is that—

> "The redbreast, sacred to the household gods,
> Wisely regardful of the embroiling sky,
> In joyless fields and thorny thickets leaves
> His shivering mates, and pays to trusted man
> His annual visit. Half afraid, he first
> Against the window beats, then, brisk, alights
> On the warm hearth, then, hopping o'er the floor,
> Eyes all the smiling family askance,
> And pecks, and starts, and wonders where he is;
> Till, more familiar grown, the table-crumbs
> Attract his slender feet."

In a small balcony on the river-side of the house, we can sit and enjoy many nature-pleasures on fine evenings. In spring, the arrival of the migrants may be watched, and their notes caught; the winging home of rooks and jackdaws to their nestlings may be observed; and we may see some heron sailing aloft slowly home from its feeding ground. In summer, bird-life is still more plentiful; and then the glories of sunset cast golden tints over earth, sky, and river. But the greatest of all these delights are, I think, in autumn. Then, after the swallows have gone to roost, the bats come out for their evening flights, which, from our inability to see what they are chasing, look so weird and eccentric; by-and-by, the glorious swifts join the bats, and wing among them their rapid flight with joyful screams; till, as day dies, the swifts disappear, the bats become ready almost to fly into your hand, and you pass into the delightful quietude of an autumn evening.

Of all plants, the growth of the perennials interests us, perhaps, most. Through their appearance year after year, we get to look out for them as familiar friends. Thus we have rows of bright pansies that come up every year, and are pretty and long-lived: clumps of forget-me-nots that are self-sown, renew-

able, and always welcome: plants of jessamine (*Jasminum nudiflorum*), that present flowers very early in spring, or even in winter: *Kerria japonica*, which bloom later: perennial stocks, that make a bright and fragrant show: groups of large snowdrops, that spring up from the bulbs, every spring, in increasing numbers: and lilies of the valley, that spread every summer so widely as to push into the very paths. Above all, there are the ferns, which grow in suitable spots all over the garden, both in back and in front, and look especially pretty when their new fronds open in spring. Some of the old fronds of the ferns, cut off in winter, serve to protect from frost the tea-roses, verbenas, and other plants that need such protection; thus, in a way, we follow Nature's plan, and use the old plants to protect the new ones. The rose-bushes, now and then renewed, come on every year, and afford us delight in budding, on some strong-growing climber, roses of various kinds and colours, all growing on the same bush. In this way we cultivate a sort of friendship with our plants and, with enough of variety, can secure durability. In very severe weather, some of them are sorely tried; but most of them go on perennially; and the sorely-tried plants, such as the perennial peas, retain some of their vitality, and afterwards revive again.

We are often reminded by poets and philosophers that it is a very wise thing to cultivate a relish for simple pleasures, such as are easy to be obtained, and are never liable to fail or weary us. Such pleasures may be readily found in the study of that Nature which, as Wordsworth assures us, "never did betray the heart that loved her." These pleasures are always at hand; they cost little; the taste for them becomes increased and strengthened by culture, and they are suitable for all conditions and all ages. Most of all, perhaps, are they suited to the exigencies of those whose days of travel may be restricted or past, and who become content, with an enjoyment that ever increases, to find their pleasures in the delightful vicinity of home. To stimulate a taste for such delights as these it may be well now and then to turn from the contemplation of loftier themes, and see how much of real enjoyment a lover of Nature may derive from so small a garden as that of which I now write.

Richmond-on-Thames. W. J. C. MILLER.

A Curious Nest.—A curious gift has been made to the Natural History Museum of Soletta. This gift consists of a bird's nest, constructed entirely of steel. There are a great many watchmakers at Soletta, and in the vicinity of the workshops there are always the remains of the old springs of watches, which have been cast aside. Last summer a watchmaker discovered this curious bird's nest, which had been built in a tree in his courtyard by a pair of water-wagtails. It measures ten centimetres in circumference, and is made solely of watch-springs. When the birds had fledged their brood the watchmakers secured their unique nest as an interesting proof of the intelligence of birds in adapting anything which comes within their reach.—*Daily News*, December 4, 1895.

PAGES FROM A DAY BOOK.*

ANYONE who loves flowers and herbs, old gardens, and old garden lore, will be delighted with Mrs. Fuller Maitland's book. Although it is in London that her heroine, a half-invalided lady, writes, yet her thoughts are, for the most part, of the country; in imagination she follows the autumn planting of bulbs and roots, the spring blossoming of the flowers one after the other; sympathizes with their joy in the sun or rain, and in her old herbals studies their quaint names and "vertues." The garden learning, the recipes for spices or medicines, legendary among English ladies, and handed down from one generation to another in old houses in the country—all these old-fashioned traditions of healing and beauty Bethia Hardacre studies and treasures. Even for the older lore of magic—of white magic, at least—she has a certain tenderness, sympathizing with the simple innocent old witches and astrologers, and finding amid all their childish and unreal science a very real and very human desire to cheat fate and sorrow. So she copies out for us the old charms and draughts, the pomanders for the cure of melancholy and "comforting of the hearte."

> "Is Vervain, Monkshood, Hellebore
> Of use in sorcery no more?
> Can Lunary and Mistletoe
> No longer serve for weal or woe?"

she writes in one of her charming little poems.

Gradually, as one reads these sketches, one comes to form, touch by touch, a clear picture of the room in which they are written—a room with bright flowers and chintzes, "few friends and many books." Now and then the door opens on the outside world; the silly Clara St. Quentin comes in, or the vulgar Mrs. Goddall. But soon they are gone; their victim with pity or delicate amusement notes down their foolish talk and turns to her quiet and books again.

Not that Bethia Hardacre scorns life, or cares little about it—it is only that she cares too much, one realizes, as one becomes aware of the book's deeper human interest; she cares too much, and, like the old magicians, would discover if she could some way of propitiating fate. But her study of the old charms, she finds, is as vain as the charms themselves for the cure of grief; it is in no occult, but in a very human form, that happiness comes to her at last when "the luck changes."

Mrs. Fuller Maitland writes with a carefulness and distinction of language that is rare and delightful now-a-days. To her, words are neither mere algebraic symbols, nor brick-bats to be

* *Pages from the Day-Book of Bethia Hardacre*, by Ella Fuller Maitland. (Chapman & Hall, 5s.)

thrown at the reader, but almost living things, as beautiful, many of them, as flowers. There is a charming page where she tells of her likes and dislikes among them—how silver, cypress, starry, delight her eye, while crate, warehouse, cautious, seem ugly and depressing. In another place colours shine as she writes: rose-pink and jade-green, china-blue and dusky garnet-red, ivory and orange.

Flowers and words, old-fashioned scents, poems and old affectations that were fashionable once but are forgotten now—things like these, Mrs. Fuller Maitland tells us, are not of immense importance compared with the great affairs of life. But we are grateful to her, nevertheless, that she has not disdained to write a very charming book about them.

L. P. S.

SHORT NOTICES OF BOOKS.

Insect Life, by Fred W. Theobald (London, Methuen. Price 2s. 6d.). Into the present neat volume Mr. Theobald has succeeded in compressing a considerable amount of information respecting insects in general, and various species of injurious insects in particular. But the space at his disposal has not been sufficient to enable him to deal with the characters and metamorphosis of insects in a sufficiently comprehensive manner. Thus, he remarks (p. 28), "The scutellum can be well seen between the wing-cases of most beetles, and is also very small;" not noticing its large size in many insects, as in the *Scutelleridæ*, or shield bugs (as an example of which he has represented one of the *Pentatomidæ* at fig. 46) of which he rightly says himself on p. 186. "The meso-thorax is much larger than the pro- and meta-thorax together, with the scutellum large or very large, sometimes covering the whole of the wings and abdomen." On page 105 we notice a more serious error, where the European *Danaus Chrysippus* is said to have been "taken a few times in England." It is not this species, but the North American *Danaus Archippus*, a very different butterfly, which appears to be naturalizing itself in England. An index and bibliography is appended to the book, but we regret the absence of a glossary of technical terms, which, as they are numerous and of frequent occurrence, would have made the book more useful to beginners.

W. F. K.

In NATURE NOTES for 1893 (pp. 28-31), we noticed at some length Sir John Lubbock's large book on the *Knowledge of Seedlings*. We are glad to see that Messrs. Kegan Paul and Co. have published an epitome of the work in their International Scientific Series. In this handy and cheap form, which is copiously illustrated, Sir John's interesting observations will be brought within the range of many who could not afford the more expensive volumes. For information as to the scope of the work, we must refer our readers to our previous notice.

"Jonathan Dale," the author of *Angling Days*, a pretty little book just published at Scarborough and at 143, Strand, is, we believe, none other than the Rev. I. E. Page, a frequent contributor to NATURE NOTES. This is sufficient guarantee that the subject is treated in a Selbornian spirit, and indeed it may be read with pleasure by those who are not fishermen. It contains an excellent selection of quotations from standard authors, and some pretty illustrations, and being well printed and neatly bound, forms a very attractive volume. Unfortunately the price is not given, so we are unable to communicate that useful piece of information to our readers.

By Tangled Paths (by H. Mead Briggs. F. Warne and Co., 3s. 6d.), is a pleasant volume of "Stray Leaves from Nature's Byeways," of the kind of which we have

already very many, but of which folk do not seem to tire. Perhaps the religious note is rather more prominent here than in some works of similar scope, but of this we do not complain, while to some it may well prove a recommendation. The chapters are reprinted from the *Kentish Gazette*, and contrasts so favourably with the average contributions to local papers, that we think the author was well-advised in seeking a wider field for his work, albeit the tendency at the present time to consider all such articles worthy of reproduction in a permanent form is to be deprecated. Selbornians will think the better of Mr. Briggs for that, having rescued a missel-thrush from cold and exhaustion, he ends his chat about the bird by saying: "I will open the door of his little cage and let him free." But the "new woman" will not be pleased with the author's reflections upon her, and is it not a little over severe to say that she "disgraces her sex" by smoking?

Mr. F. J. Whishaw's *The Romance of the Woods* (Longmans, 6s.), should have been noticed sooner, and would have been had we not hoped to speak of it at greater length than is now possible. He takes us into regions mostly unknown to the average naturalist, for few of us reach Russia, and stories about bears at first hand are not common. Here, indeed, a bear tells his own story, and very interesting it is and very well told. Then there is "The Bear that died of Curses," a good deal of the folk-lore of the monjik or Russian peasant, and stories about witches, wood-goblins and the like. There is plenty of natural history as well; the book is well written, and the contents, as will be understood from what has been said, very attractive.

Messrs. Seeley & Co. have produced a pretty edition of Miss Mitford's *Country Stories* (6s.), illustrated by George Morrow, which forms no unworthy companion to the *Our Village* noticed in this magazine for 1894. Mary Russell Mitford's works need no commendation from us; it is not to be wondered at that they find a new public at a time when the actuality of country life recedes more and more into the past, while the appreciation of its charms seems to increase. Mingled in the stories are pretty descriptions of gardens and their contents, and of woodlands and their flowers. It is to be regretted, however, that someone was deputed to correct the spelling of some of the names; if, and it is possible, Miss Mitford was lax in this respect, there is no reason why so pretty a book as this should be disfigured by such extraordinary perversions of *Cobœa*, *Lophospermum*, and *Eccremocarpus* as "scobœa," "lotus spermus," and "acrima carpis."

SELBORNIANA.

A Rook Query (p. 56) **Answered.**—If personal experience is of any use, I may reply "None." About twenty-five years ago some friends of ours possessing a very old rookery in the vicinity, borrowed our house for a few years during our absence abroad. Some of their rooks followed them here, built and remained. These rooks were naturally most welcome guests to us, and they have continued to multiply year by year, gradually drawing nearer to the house, so that this season we lie in bed and watch them build—one nest almost hangs over the house. As we are staunch humanitarians it is superfluous to mention that no shot has ever been fired at them. They are as tame as barn door fowls, strutting about the lawn to pick up leaves for their nests, and on all cold days coming regularly to be fed. Last winter during the extreme cold they consumed two whole sacks of corn and a large number of potatoes. They were fed twice a day on both sides of the house, on especial plots of grass, swept for them, and they never interfered with the small birds, who were fed both on the lawn and on a "bird table." In the morning they might be seen waiting about on the trees till the well known call, "rook, rook," brought them all down in a black cloud. This winter their behaviour has been most curious. Owing to the mildness of the season they have not needed our hospitality and have never "waited about," save on the few frosty mornings we have had. On each of these occasions the

"caw, caw," from the two nearest trees has warned us that it was time to ring the rooks' breakfast bell, and they have always been attended to at once. We place the chicken coops at the stables close to the rookery, as the birds set up such a chorus of caws if any stranger, human or animal, appears, that we have no fear of foxes or such enemies to poultry. There are certain birds more fearless than the others, and these we believe to be the older rooks, who have proved us and "found us faithful." One of these recently flew down and took a bone from the dog's kennel as he sat within a yard of it. Our rooks never steal our potatoes in the garden, nor trouble us in any way, save by a litter of sticks. We had about sixty nests last year and it is a great source of amusement to watch the young birds in the nests from the upper windows. I think even Charles Waterton would have been surprised could he have seen our laden oaks and beeches, and to have seen a black cloud of birds approach the windows so fearlessly whenever "rook, rook," is called to the accompaniment of pieces of bread and potato flying through the air.

Romsey, Hampshire. F. H. SUCKLING.

Cats and Birds (p. 56).—I cannot help thinking it would be a pity to follow the advice of J. W. H., *i.e.*, to turn a kitten into a room "full of birds, of course in cages." He goes on to say that besides canaries, the cages contain "bullfinches, linnets, siskins, &c., &c." Surely to keep these beautiful wild birds in cages is to encourage the horrid trade of the bird-catchers, and to disregard one of the "ways in which the objects of the Selborne Society can be promoted," the fourth "way," set forth in the leaflet of our Society, being to preserve ". . . birds from hawkers, bird-catchers, &c." The way we preserve our wild birds in this garden from cats is—not to keep a cat at all! but when mice become troublesome, to catch them in traps, which I cannot help thinking is the better way.

Horsell Vicarage, Woking. ROSE TURLE.

[But how if the mice won't go into the traps? That is our experience at the present time, and we fear the sparrows who find food and water in our back garden must prepare for the advent of a cat.—ED. *N.N.*]

Ham Fields Saved.—It is with the greatest satisfaction that we record the defeat of the Richmond Corporation in its attempt to confiscate the Ham Fields, the House of Commons having rejected the proposed Bill by 257 votes against 115. "The Bill," says the *Daily Chronicle*, "incidentally aimed at confiscating the rights of the people over a large area of common or lammas lands known as Ham Fields, lying between Richmond and Kingston, and extending to nearly 200 acres. The Bill was a flagrant instance of the manner in which the promoters of these dangerous measures attempt by a side wind to go counter to the law of the land. It contained a clause which was denounced by Mr. Courtney as being a violation of the principles in regard to the closing of land laid down in the Metropolitan Common Acts of 1866-9. By these Acts the Board of Agriculture are forbidden to entertain any application for the enclosure of any common or lammas lands within the Metropolitan Police district. Under them the Hackney Downs and the other Hackney Commons—all of them lammas lands—have been placed under the care of the London County Council for the good of London as a whole. The effect has been that no enclosure of any metropolitan common has been sanctioned by Parliament since 1866. And yet in spite of these Acts this Bill, called the Petersham and Ham Lands and Footpaths Bill, actually contained the following clause:—'All lammas and all other commonable or other rights of whatsoever description exercisable between harvest and seed-time, or at any other period in or over or in respect of any of the lands . . . . are hereby extinguished as from the passing of this Act.' The land which the Bill aimed at enclosing has been reclaimed at the public expense and is now freely open to the public. It lies on the Surrey bank of the Thames, in one of its most beautiful reaches—from Richmond to Teddington Lock. If the Bill had been passed, footpaths would have been closed, and a beautiful grass sward would have been turned into a hard carriage road. And in return for all this, the Bill offered, as a bribe, a grant of money to a school in Ham, and a meadow of a most unattractive kind. Such were the sweeping proposals incorporated in this private

Bill, which would probably have been passed, to the detriment of all London, if it had not been strenuously opposed by a small knot of enlightened Londoners, among whom Mr. Burns and Mr. Labouchere fought in the fighting line."

"Good News for the Birds."—I read with interest the article in your last issue bearing this title. The writer who suggests that every order is in due course printed and put on sale after the fashion of parliamentary papers, will, perhaps, be surprised to learn that the latest order issued by the Queen's Printers (Eyre and Spottiswoode) bears date September 7, 1895. For the convenience of those who are interested in this matter, the Society for the Protection of Birds has printed in full the orders issued up to and including January 29, 1896, as an appendix to their last report, and are now issuing this with the eleven orders since granted, as a special leaflet. I should be pleased to send a copy to any of my fellow Selbornians who might desire to consult it.

Hillcrest, Redhill, Surrey. MARGARETTA L. LEMON.

NATURAL HISTORY NOTES AND QUERIES.

Where to Hear the Nightingale (p. 59).—I have heard a nightingale in Highgate Woods; they have been frequently heard at Eltham and Chislehurst, and were plentiful near Croydon; but every year they are leaving their haunts near London, on account of the clearing away of copses. I would recommend J. Hudsworth to go a few miles south from London, say by the S.E. Railway, early in May, and he will find them very abundant throughout the whole district from Reigate to Godalming. Between Reigate and Dorking on a still, mild night, at the above time of year, there are villages, amongst which may be specially mentioned Brockham Green, near Betchworth Station, where they may be heard in large numbers on all sides, as far as the ear can reach. They are so tame that, by approaching cautiously, it is easy to stand by the very bush in which one is singing, and watch the bird in clear outline against the sky. Many people miss hearing nightingales through going out too early for that purpose. They sing all day, except for a short time at mid-day, and through the whole night, but invariably stop to feed in the twilight of evening and early morning. They sing from the middle of April to the middle of June, but are at their best a fortnight or three weeks after their arrival.

EDW. W. WAITE.

I can confidently recommend Wimbledon Common as a sure find for nightingales at all times during the season. There are thick woods within a few yards of the tall flagstaff which always shelter a few pairs every summer, and sometimes —last year for instance—a brood is successfully reared. I say "sometimes" advisedly because the Common is simply overrun with marauders, and it has to be a well hidden nest indeed to escape them. The thickets down by Beverley Brook, close to the Robin Hood Gate of Richmond Park, also hold a good many nightingales.

W. N. RUSHEN.

Bishop's Wood Avenue is now the nearest place that I know of, about five minutes' walk or so from Hampstead Heath. Hampstead Heath itself on the west side, close to the Leg-of-Mutton Pond, was, before the undergrowth was cleared from under the hawthorns, a favourite place for those chief of songsters.

JAMES E. WHITING.

Gull and Sparrows.—One Sunday, when walking in St. James's Park, my attention was drawn to a sea-gull, which, with menacing attitude, and outstretched neck, was moving in the direction of a number of sparrows. My attention was for a moment withdrawn, when my companion touched me and said: "Look!" and there was the gull, with a sparrow in its beak, making quickly for the water. The bird then deliberately drowned the sparrow, dipping it in, over and over again, till the poor little body hung limply down with every vestige of

life fled, and then with one gulp it was swallowed, while a companion gull screamed and flapped its wings, probably wishing it had been equally lucky.

EDITH A. STOCK.

Ivy.—We have lately experienced very unpleasantly the wonderful power of growing ivy. I have often noticed that a quantity of ivy, of the slow-growing kind, covering a part of the east end of our church, appeared to have no stem or root with the exception of one boss about the size of a man's fist, which protruded from between the flints and mortar some distance below the foliage. There is a buttress between the chancel window and that of the chantry chapel, which has been showing signs of unsoundness, and on being examined has had to be removed and rebuilt, for inside, pushing it gradually down, a strong old ivy stem has been found, measuring from sixteen to twenty inches in circumference in the thickest part, and twisted in with other stems of the same, the whole matted mass quite eighteen inches in width, and holding flints and mortar as if in a vice imbedded in it, so that they had to be taken away with it. This had grown inside for the height of at least six feet, and the foliage above bore plenty of handsome berries, and harboured a large colony of our pertinacious enemies, the sparrows. The mischief has only lately become apparent, but the ivy must have been doing its work secretly for a hundred years or more.

North Moreton, Wallingford. M. F. Y.

TO CORRESPONDENTS.

N. G. and others.—See first note in "To Correspondents" in March NATURE NOTES.

J. A. H. B., H. F. C., and others. Kindly read Rules 4 and 5. Communications should not be sent to the publishers or city agent.

M. T.—Your note does not alter the opinion we have already expressed.

A. M. B.—Space will not allow us to reprint the letters.

C.—(1) *Thuidium tamariscinum.* (2) *Brachythecium rutabulum.* (3) *Atrichum undulatum* and *Lophocolea bidentata.* (4) *Hypnum cupressiforme.* (5) *Pogonatum aloides.* (6) *Leptobryum pyriforme.* (7) *Lophocolea bidentata.* (8) *Hypnum purum.* (9) *Atrichum undulatum.* (10) *Mnium undulatum.* (11) *Bartramia pomiformis.* (12) *Hylocomium squarrosum* mixed with *Hypnum cuspidatum.* (13) *Polytrichum formosum.* Please note that we do not undertake to name more than six specimens at a time.

G. A. and others.—Please note Rule 3.

WE must request those who favour us with their communications to observe the following rules. We cannot undertake to notice the contributions of any who fail to comply with them.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN. as above.

SELBORNE SOCIETY NOTICES.

Annual Meeting and Conversazione.—The Conversazione has been fixed for Thursday, May 7, 1896, from 7.30 to 10.30 The Annual Meeting will commence at 8. The loan of natural history exhibits (Selbornian) is earnestly requested. Offers should be sent to Hon. Sec., Conversazione Committee.

Field Club Saturday Rambles :—

April 11.—Leave Chingford Station on the arrival of the 2.34 train from Liverpool Street (Clapton 2.45), thence by roadside and borders of "green ride" to Fairmead Lodge, returning by Connaught Water to tea at Forest Hotel about 5; afterwards visiting the museum of the Essex Field Club at Queen Elizabeth's Lodge.

April 18.—Meet at Charlton Station at 3 (Charing Cross 2.20, Cannon Street 2.30, London Bridge 2.34). Examine geology of Charlton Pits. Return fare, 1s. 1d.

April 25.—Meet at Kew Gardens (principal entrance) at 3 (Mansion House 2.3, Broad Street 2.8, Waterloo 2.15). Return fare, 1s.

May 2.—Meet at Thornton Heath Station at 2.32 (Victoria 2.7, London Bridge 2.3). Inspect Dick Turpin's house, tram and walk to Beddington by Mitcham Common, Return fare, 1s.

Council and Committee Meetings.—The next meetings of the Council will be held on April 2 and May 7 at 5.30; of the Magazine and Leaflet Committee on April 16 and May 21 at 5.30.

BRANCH CONTRIBUTIONS.

	£	s.	d.
Barmouth	0	10	6
Bedhampton	1	2	8
Croydon	0	4	3

Preparation of Balance Sheet.—Hon Secs. of Branches who have not yet sent in their payments for magazines for 1895, or their Branch contributions, are requested to kindly do so at once.

NEWS FROM THE BRANCHES.

Bath.—A large number of members met at the Royal Literary Institution on February 27, to discuss questions affecting the preservation of wild birds and flowers. The President, Mr. H. D. Skrine, occupied the chair. The discussion was opened by the Hon. Sec., Mrs. Wheatcroft, who read an interesting and exhaustive paper, and was continued by the Rev. E. T. Stubbs, the President, Mrs. Ashworth Hallett, Dr. George Norman, and Col. Bingham Wright, who suggested that a list of protected birds should be given to every game-keeper with the license.

Croydon and Norwood.—A drawing-room meeting was held on March 5, at The Cedars, London Road, by kind permission of Mrs. Perry. On March 19, Mr. F. W. Ashley, F.Z.S., lectured before a large audience at Moffat Road school-room on "Our Fields and Woodlands."

Kensington.—Miss M. Danvers, 103, Lexham Gardens, Kensington, has kindly undertaken the post of Hon. Sec. of the Branch, *vice* Mrs. Greg, resigned. The Council tenders its best thanks to Mrs. Greg for the warm interest which she has shown in the work of the Society.

Ealing.—At the Council Meeting of March 5, a petition was received from the members of the Ealing section of the Lower Thames Valley Branch, asking for permission to re-establish the Ealing Branch. The Council were pleased to grant the required permission. The petition was signed by thirty-three members of the original branch. Mr. H. W. Ravenshaw has kindly consented to act as the Honorary Secretary, *pro tem.*

Weald of Kent.—On February 26, an interesting lecture on "Wealden Rocks," illustrated by lantern slides, was given at Southboro', near Tunbridge Wells, by Dr. Abbott, to members of the Scientific Field Club and their friends.

EDWARD A. MARTIN, F.G.S.

Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:

The Selborne Society's Magazine.

No. 77. MAY, 1896. Vol. VII.

BIRD-NESTING.

BIRD-NESTING, as commonly understood and practised, must always be strongly deprecated by the Selborne Society; and even the more humane bird-nesting, where few eggs are taken—and then only when wanted for some sufficient purpose—and the nest left uninjured, is so liable to abuse, that lovers of bird life hesitate to say anything that might encourage it. But there is one kind of bird-nesting which has all the pleasure that can be gained from this pursuit, with none of the remorse, and from which an extensive knowledge of birds and their habits is to be acquired, without causing the birds themselves any trouble beyond a few moments' uneasiness. Little birdcraft is required to walk along a hedgerow until the bulky and conspicuous nest of a blackbird or thrush is seen amongst the half naked twigs, and the individual who can find any satisfaction in dragging out that bundle of dried grass and the blue eggs is beyond the reach of humanitarian influence. But all birds do not place their nests in such exposed situations, and there is a keen delight to be gained from the search for some of these better concealed bird homes, and when found, the position and materials carefully observed, the number and marking of the eggs noted, there is more real pleasure in leaving everything as you found it, and listening to the happy chirruping of the little owners as you retire, than can be got from any number of casual glances at the eggs in a cabinet. This kind of bird-nesting the most conscientious Selbornian can recommend, and also indulge in with profit; for it improves the powers of observation, and gives a more accurate knowledge of bird life than can be gained from books.

Lost in the blue sky above, a lark is singing a joyous song to its mate somewhere beneath him, and as one watches him slowly descending until he disappears in the grass not many yards away, the discovery of his nest would seem an easy task. That it will not be hidden in a hole, or under bush or stumps I know, and as the grass is not a foot high, my quest must soon be successful. I search diligently, covering, as I think, every inch of the ground within a circle of twenty yards from where I saw him alight. I bend back every overhanging tuft, and still do not find the nest. Again I go over the ground, until suddenly, at my very feet, I see, lying on a bed of died grass, five mottled eggs, harmonising so well with their surroundings that I am surprised no longer at their escaping my notice.

As I retrace my steps to the path that runs by the side of the wood, a low sweet trill catches my ear, and anxious to see and identify the little songster, I stand quite still in the shadow of an old elm. In a moment or two the song breaks out again, just to the left, and taking care to move neither hand nor foot, I slowly turn my head in that direction. But slight as the movement was, it was sufficient to startle the bird, and I only catch a glimpse of a flash of yellowish green darting off between the trees. The colour confirms what the song had suggested, and I know I must be close to the nest of a woodwarbler. Like that of the skylark, this nest will be on the ground, and I expect even more difficult to find; but the bird itself shall be the guide. I walk a little further into the wood, and placing myself in as comfortable position as possible under the circumstances, behind the screen afforded by a low bush, I wait with patience the return of the little songster. But the personal discomfort is not slight; a persistent desire to sneeze must be overcome, and the conviction that the whole crawling population of the wood have located themselves in my immediate neighbourhood grows stronger each moment; but to move now would be fatal to success. How much longer will he be? Ah! here he comes at last, flitting from tree to tree with an easy graceful flight: now dropping to the brambles beneath, then up again, to rest on a low branch, whence he darts out to catch some passing insect, singing the while snatches of his low sweet song. He stops now on the oak tree in front, and from his cautious movements it is evident he is not far from his home. Suddenly he bursts out into song, and hurries through his whole melody, from the opening trill to the mellow closing notes. A few false starts and then he drops down amongst the young bracken, and is lost to sight. I mark with my eye the exact spot where he disappeared, and in a few minutes out he comes again, not far from the spot where he went in, and flies off noiselessly down the wood. I wait awhile for the hen bird, but see nothing of her, from which I deduct that the eggs—if any—are not yet hatched, and that she is sitting close. I leave my hiding-place, and examine the spot where the cock bird had alighted, and look long and carefully

for any indication of the site of the nest. Failing to find any, I push my stick into the ground to mark the spot. I work my way slowly towards the heap of dead burdocks a few feet ahead. Starting from the stick again, I go to the right with no success; then to the left, till at last, after half an hour's diligent search, I see the bright eye of the brave little hen bird, watching me from amid the rank grass, pushing itself through the decaying leaves of last year. I stretch out my hand towards her, and with a shrill cry of alarm she flies off, and the nest and eggs are at my mercy.

How pretty they are! To take the nest from its surroundings would be to spoil it. Composed principally of grass, and bent over at the top to form a kind of roof, lined with a few dead leaves and a little horsehair—which latter fact helps to distinguish it from the nest of its near relative, the willow warbler, which is generally lined with feathers—five little plump eggs, thickly spotted with small dark purple spots, and here we have all that those tiny birds have travelled from Africa to accomplish. Long and tiring must the journey have been, but borne up by hope they struggled bravely on, over sea and land, back to this quiet wood, and he must be heartless indeed who would rob them of their treasures. I take one of the eggs carefully in my fingers and examine it. How delicate the shell! How beautiful the markings! And as I gently replace it in the nest, I feel how infinitely better it is that it should be allowed to give to the world another sweet singer, than to be hidden away in the dark recesses of a cabinet.

F. W. Ashley.

INDIAN PARIAH DOGS.

T is one of the commonplaces of observation that the instinct in children is strong to endow with human qualities the objects with which they come in contact. Thus your little girl gravely puts her sawdust doll to sleep, and your little boy looks upon the dog with whom he romps as more or less a human playfellow. In the same way he regards the dogs of neighbours as potential friends, whom only an opportunity is necessary to convert into actual ones. But in India the pariah or mongrel cur is always considered by the boy to be beyond the pale of fellowship. He is the outcast of his species, against whom every honest dog may raise a bark, every boy a hand; and we are not sure that when the boy attains to what are called years of discretion, his estimate of the pariah alters, for from a steady course of experience the idea of the mongrel gets to be associated with vagrancy and petty larceny. He does not even possess the merit of any great vice.

We confess to having long shared this feeling towards the Indian pariah, but a residence during some years in the Mofussil, where he may be studied in his habitat, has induced us to correct our impressions, and to hold that, on the whole, he is a somewhat maligned creature, who, for fidelity and trustworthiness, compares not unfavourably with the more fortunate members of his species.

One of our chief reasons as boys for holding the pariah to be beyond the pale of fellowship, was that he owned no master, and was owned by none. Whenever we saw him he was bent on some thievish errand, or was in full retreat, bearing the traces of discovered guilt in the pursuing stick or stone. Where he lived was a mystery, and as nobody owned him nobody offered a reward for him when he disappeared, or threatened reprisals or legal proceedings if he was put out of the way. This was our experience of the pariah in towns, but in the Mofussil things are different. Here the pariah does not pursue an unblushing career of crime, for though he is by nature of a roving disposition he soon settles down to what may be termed the regular habits of a householder. He chooses his own master and cleaves to him for better or for worse. In the matter of making a choice his arrangements are very simple. He takes up with the first unguarded house in which he finds something to eat, and remains in its neighbourhood, fighting off interlopers of his own kind, and waiting for a morsel to be thrown to him. This he will take to be a sign that his services are accepted, and his position as sole guardian of the homestead secured. The only sign perhaps that the master will henceforward give of his ownership will be to chastise the dog occasionally. He will never stroke or fondle him. Such details as regular meals or baths for his four-footed servant will, of course, never enter his mind. But the pariah is thankful for the smallest of favours, and once the fiduciary relation between master and dog is established he will fulfil his part of the contract to the letter. To say that the pariah guards his master's house as well as the village choukidhar (watchman), would be both libelling the dog and flattering the man. The pariah does not, indeed, pretend to much courage, but he seems never to want sleep at night, and has a voice of wonderful capacity for destroying sleep and so giving an alarm.

Having observed the pariah so far, and found that he could develop into an excellent watch dog, we began to consider our boyish idea that he was beyond the pale of fellowship to be somewhat erroneous, and experience soon compelled us to dispel it as an illusion. When we came to our present Mofussil station, we found a pariah in charge of the bungalow we were to reside in. We did not know he was on duty, and attempted to dislodge him. It is needless to say we did not succeed, and we determined to leave the ugly custodian of the place severely alone. He, however, considering, no doubt, that it was a pity

that neighbours should not be friends, came and lay in our path one morning as we were going to cutcherry, and raised his forepaws towards us as we passed, thereby denoting his willingness to be on good terms with us. We responded by stroking him gently with a cane, and his delight showed itself in the wagging of the curled up tail and a series of ungainly capers. Our friend then began to associate with our own house dogs, and, which is curious, to copy their ways. He is a big dog, and could have made a mouthful of our little terriers, but he always treated them with respectful attention, either because of their gentlemanly ways, or through consciousness of his lower status. Doubtless, too, he imitated our dogs with a view to obtain our better and more cordial opinion of him. But his imitation could hardly be termed thorough, for though he learned to take a biscuit in a well-bred way, and even once went for a mouse, he declined to be bathed. Your true pariah has the cat's aversion to water without the cat's instinct for keeping itself clean.

Sometimes we do not see our friend for days; when he again turns up after one of his long absences we notice he is spare of flesh or bears red marks of battle on his striped coat, we know that he has returned from a raid into an enemy's country, and that when the roving spirit comes on him he will not be kept at home for anything. The argument of a collar and chain has been tried, but without success. Domesticate a pariah as much as you like, he will never get over his aversion to these badges of servitude. From all that we have said they seem, indeed, to be hardly necessary, for the only difficulty that arises when you have got your pariah is how to get rid of him. If he elects to look after your place his motto becomes "*j'y suis, j'y reste*"; and all the king's horses and all the king's men would find it very hard to evict him. When a collar is put round his neck and he finds his liberty restricted to the length of his chain, he not unfrequently proceeds to howl in protest until the obnoxious band is removed. Some matter of fact people say that as the pariah's progenitors led a free and unchained existence his aversion to the collar and chain is natural, being inherited—a bold theory that needs only to be mentioned to be dismissed, for it is obvious that if these faithful ugly awkward companions of our Mofussil life could explain, they would say that after they had given us their allegiance they could not but resent the employment of means to compel their service as an indignity and an insult to their loyalty.

J. J. Platel.

Shenidah, Jessor District, India.

HAMPSTEAD HEATH.

MR. WALTER FIELD has published the following answers to Mr. Fletcher's statements at the London County Council, and as they supplement our article in the April number of NATURE NOTES, we reprint them here:—

MR. FLETCHER'S SPEECH AT THE COUNTY COUNCIL, MARCH 3, 1896.

Replying to questions Mr. Fletcher said:—

"That the petition, although signed by several influential gentlemen, was presented at the instigation of one gentleman, he being the only one who lived on Hampstead Heath."

MR. FIELD'S ANSWERS.

A person who lives on the Heath is the right person to take the matter up, as he has absolute knowledge of the facts. I have used every endeavour to give you the opinions of the highest authorities so that they may serve for your future guidance in preserving the renowned beauties of the Heath.

"The whole matter was one of misunderstanding."

There is no misunderstanding on my part.

"The bulk of the damage was due to tramps, picnic parties, cyclists, who tore down the May, children who played on the sand-banks, &c. All this was no fault of the Council, but Mr. Field could not be made to comprehend this fact."

The damage I complain of is not done by tramps, but by the Council's workmen.

"Mr. Field had seen the Council's men repairing the damage done, and consequently thought that the Council was doing the mischief."

This is not so. I have not seen the Council's men repairing damage done by tramps, &c., but what I have seen is the men doing mischief by cutting and burning gorse.

"He had assured Mr. Field again and again that the Council was not interfering with the West Heath in any way, except in one particular, and that was in cutting down the old gorse."

The Council's workmen are interfering in several other ways. Lovely ponds, of which I have sketches, have been filled up, and have now only rushes to show where they were. Also picturesque paths and banks have been levelled.

"Mr. Field was an artist with but limited knowledge in the cultivation of this plant. Authorities had said that the Council in this respect were acting rightly. Mr. Wm. Robinson, the greatest authority in England on the question, said in his book entitled *The English Flower Garden*, that gorse was specially subject to injury from weather, and the only way to save the shrubs was by vigorous pruning."

I made bold to write to Mr. Wm. Robinson, and he answers me:

"*March* 19, 1896.

"Furze in our country is often killed in valleys and low ground in hard winters, but much less frequently on high ground like that at Hampstead, and very old picturesque groups of it may be seen on heaths and high ground. In such places, from a picturesque point of view, it is better let alone! I sympathise with your desire to have Hampstead Heath kept picturesque, and there is no real difficulty about its being so preserved. It would be the greatest gain if we got rid of the idea that there is only one regulation way in laying out parks and open spaces. It would do

good if you made it clear at Hampstead that everything is gained by taking advantage of any natural beauty of ground and vegetation, and *not* destroying it. Where there is distinct beauty of both, as at Hampstead, it should be the first duty of the authorities to preserve it. I need not say where the beauty of your Heath will be if the smug lawns and chaos of iron fencing, often seen in West End parks, should ever rule at Hampstead.

"Yours faithfully,
"W. ROBINSON."

"*March* 20, 1896.

"I hope you got my letter yesterday. You may be sure that sweeping up and raking fallen leaves in a rough heath like Hampstead Heath would be worse than labour wasted. It is much better to leave the leaves to nourish the shrub roots in the ground. This takes place in all woods and copses whether planted by man or natural, and without it their fertility would not be preserved. Even in pleasure grounds it is often better to leave them wherever they are caught and fixed by the trees and bushes and are not absolutely in the way by lying deep on frequented footpaths.

"Yours always faithfully,
"W. ROBINSON."

"With reference to the suggested overcrowding of trees on the East Heath, Mr. Fletcher said that some of the trees would die, and others would be damaged, and in this way they would be thinned—but that he would report further on the matter."

The chief objection to the trees is a general one, viz., that they totally alter the character of the Heath, and are not wanted. The public opinion is unanimous not to have their view of St. Paul's completely shut out by trees, as is now the case from the Spaniard's Road. These trees will certainly have to be removed.

"As to the filling up of pits, he said that one barrowful of sand had been taken to fill up a hole which had been pointed out as being dangerous."

Any one looking at the raw place on ground where "one barrowful" was taken will see what was the real case, viz., that many cartloads were taken away, which I was called to watch with my own eyes. Please understand this is only one of many, many hills destroyed.

An authorized committee of taste is essential, with a responsible clerk of the works. It is utter ruin to the picturesque to allow damage to be done for want of supervision.

We commend these answers to the London County Council, and especially to the Chairman of the Parks Committee and its chief officer, Colonel Sexby. We wish we could add an expression of our confidence that outrages like this will be impossible in the future, but unfortunately the action of the Council does not justify such a hope.

TWO LITTLE INDIAN SAURIANS.

UNDER the term "saurians"—from "Sauros" the Greek for lizard—naturalists reckon generally the crocodiles, water and land lizards, cordyles, skinks, acontiads, sand lizards, geckos and agames; and they also include in the group those fossil reptiles, the skeletons of which have been restored with amazing care by many able palæontologists. These fossil saurians are named ichthyosaurus, plesiosaurus, deniosaurus, iguanodon, and the pterodactyles.

The whole family of these reptiles is very diversified both in form and habits. For the most part they are covered with scales upon the body, some may even be said to be protected by scale armour as in the case of the crocodilidæ. They are all as a rule provided with four legs, though some have only the rudiments of the hind limbs, as the acontiads. Some, again, are snake-like in appearance, or perhaps I should say resemble more the worm. They are all provided with tails which are more or less thick at the base. Of the fossil species the greater part were marine, some amphibious, others terrestrial, while the pterodactyles or winged lizards seem to have been qualified for all services in air, earth and water. These extinct flying reptiles, could by folding their wings crawl as lizards, stand erect, and as we are assured by Mantell, the distinguished geologist, they possessed the power of being able to perch on the bough of a tree like a bird.

I am afraid that perhaps this is too elaborate an opening for my unpretending little paper, for I only propose to treat of two very insignificant and harmless members of the land lizard group, or lacertidæ, and that, too, in no scientific a manner. These two are one of the *Uromastix* and the *Draco volans*, both belonging to the sub-order *Agamidæ*.

For an account of the former, I am again indebted to both Mr. Thomas and Mr. John Barlow, who, having lived for many years in the Punjab, have had peculiar opportunities for becoming acquainted with the people and the fauna of that country.

They describe this lizard as averaging in length about ten inches, of a somewhat dark sandy colour approximating almost to the hue of the dry and waterless plains of the Punjab in which they are to be found in large numbers. They have a short rounded head with a somewhat keen eye, but with no excrescence or crest on the back, but with a very tough skin. There is no bag or sac to the neck. Perhaps the most peculiar feature they possess is a long thorny tail, these thorns or rather spines being found only on the upper portion and sides, and none beneath it as in one of its Arabian congeners. They have the four legs common to most of their tribe, with strong and well developed claws.

Though somewhat dull, and even inert, they nevertheless are

capable of a very rapid movement when under alarm; though timid as a hare on the approach of danger, yet, I should repeat, they hurry off to concealment in their holes with great alacrity; these holes they burrow in the sand or clay to a considerable depth, and they construct them in such a manner that the animal can enter in for about its own length in a direct course, and then go off to the right or left as the case may be. When reaching its hole under fear, it at once disappears from sight, but, in the apparent belief that its thorny tail will protect it from harm, it may often be seen to escape from the hole with the tail foremost. Its great enemy is the snake, and to guard against its inroads at night the lizard puts together a sort of mud cork or lid to the hole which the natives term a "Dutta."

There is a tribe of low caste Punjabis, of the sweeper caste, known as "Chooras" who eat this lizard, which they call a "sanah," and so much do they relish it that they may often be noticed in pursuit of it. From the description I have already given it will at once be understood that their task is not an easy one, but they are very successful none the less. They provide themselves with a heavy wooden mallet with a long handle; this mallet is square at one end and pointed at the other, and is termed by them a "dhremna." They have also a wooden peg or pointed piece of hard wood of about 18 inches in length, which is styled a "killie." Furnished further with a coarse bag and a string girdle round the waist, they are fully equipped for the hunt.

During broad daylight they approach the sandy, gravelly plains frequented by the "sanah," and stealthily advancing they watch for the retreat of them to their holes, and marking down what seems to them a likely find, they go near to the hole and strike the ground heavily with the dhremna at about a foot from the entrance; this has the effect of driving the sand into the hole, and so cutting off the further retreat of the sanah; then with the killie they extract it, break its neck, and hang it over their string girdle. The animal is so inoffensive that it never attempts to bite. If very successful they fill their girdles and put the over-plus into their bags. The mode of preparing the sanah for food is generally by boiling, though sometimes they are eaten with curry, but more often with a chupathi or unleavened cake of wheaten flour seasoned with salt. Some too for future use are exposed to the blazing sun, and dried. Out of the skin of this lizard the chooras make little bags to carry their tobacco and other daily necessaries.

They prepare also an oil from it with which they anoint their bodies, with the view as they say to recruit their vital powers, and to renew their strength after illness. This oil is much sought after by Mahomedans, who though, like those of the Jewish faith, are forbidden by their religious belief to eat of any "creeping thing that creepeth upon the earth," are not precluded by the laws of Mahomed from the external application

of any medicine that may be famed for its restorative properties. The Chooras themselves appear to have little or no respect for religion; they own, however, a sort of allegiance to a mythological being, styled "Googa Pîr," to whose worship there are several shrines up and down the country.

These low caste Chooras are not an idle class by any means, but earn a livelihood by the weaving of a kind of coarse cloth and the manufacture of baskets. They make a great variety of these out of a reed grass called "kannah" or "surpat," known to botanists as *Saccharum procerum*, and also from other grasses which Nature has so abundantly distributed through the tropical parts of the world. The largest basket they make is the "thoung," which is about two feet six inches in diameter, and is used by the farmers and others as a receptacle for clothes. It is provided with a lid. The next in size is the "kharrah," used for farm purposes; then there are the "chujh," and the smaller baskets for household use, as the parota, parotee and pirrie, which are ornamented with designs, executed rather prettily in different coloured threads.

Just one word more in regard to these Punjabi lizard hunters, viz., as to their language. They speak Punjabi as a matter of course, but having no caste distinction, and being in a manner isolated, they have established among themselves a provincial form of speech which may be justly termed a debased Pushtoo. I give just one or two instances. In greeting one another for example, they say "Têk muthay koon," which answers to the "Salaam Alaikoom" of the Moslems. They have also a peculiar slang; a policeman they call a "mukhi" or "fly," for like the flies they say the police are a never ceasing tease and annoyance. When they see one of these officials they at once call out to their fellows, "Oorêt purêt," literally, here and there, or scatter yourselves and get out of the way.

But enough, I must now pass on to describe briefly my other little lizard, the *Draco volans*, or "flying dragon," a wonderful little reptile with the general form and habits of its kind but possessed of a semi-circular membrane on either side of its body which it has the power to draw in or expand at pleasure. When seen crawling upon a tree it has all the appearance of an ordinary English lizard, but when desirous of making a spring to an adjoining tree, it extends this membrane so as to act as a sort of parachute. It does not use it as a bird does its wings, but merely to enable it to skim through the air, and so to sustain itself from falling to the earth when it makes its leap. I have often watched its movements where I have seen it in the Malay Peninsula, and have been always greatly interested—I might almost say impressed with wonder. This little creature rarely exceeds four inches in length without the tail, and is of a dark brown colour, shot with a bluish grey. In the sunlight it has a sort of bright silky lustre, and when one is fortunate enough to catch it sailing in the air with its gossamer-like membrane, and

its pointed dewlaps spread out to view, it is really a very pretty sight. It is very harmless and feeds on insects.

J. F. A. McNair.

Scotia, Preston Park, Brighton.

TREE-FELLING AT KEW.

THE *Saturday Review* of March 28 contains a severe criticism of the tree-felling which is now being carried on in Kew Gardens. As it is stated in the article that the newspapers have taken no notice of what is going on, and no contradiction of the facts as reported has, so far as we know, appeared, we think it well that Selbornians should know what is being done, especially as rumour says that the article is from the pen of one who has already done good service in the cause which they have at heart. The writer, however, is in error in supposing that the Director of Kew Gardens is uncontrolled; Kew Gardens is under the Office of Works.

"The Director of Kew Gardens has once more been seized with the vernal frenzy, and many persons are watching his tree-destroying antics with poignant grief and dismay. These are not of the dumb class of mortals. The inhabitants of Kew are mostly well-to-do and educated people; furthermore, Kew is a favourite resort during the spring and summer months of thousands of Londoners. But they know that it would be idle to raise their voices in this case. Even those extremely vigilant and deep-mouthed 'watchdogs,' as the newspapers have not inaptly been named, prefer to remain quiescent. They were very loud over the tree-felling at Epping Forest, but the overseers of the Forest are not in a position to treat the press and public opinion with contempt. Kew Gardens is a little independent empire of itself, and its Director is a despot in his place, with absolute power to do whatever seems to him best.

"It is nothing less than a calamity that a man placed in such a position should be wanting in a sense which is found in the highest and lowest, and is so common as to be all but universal. There is no doubt that he is aiming at something definite; that all these sad hacking, thinning-out, and opening-up operations are necessary for the carrying out of a plan which exists perfected in his mind. He may tell us that it is too soon for an onlooker to give an opinion; but in the meanwhile many noble trees of a century's growth are being cut down and sent away to the timber-yards; and if we may judge from what appears, nothing but a vulgar little taste in landscape-gardening is the motive for these changes, and the end of them will be the transformation of Kew Gardens into something like a pretty tea-garden.

"It is reported that the Director loves not trees in masses, and the deep shade they cast—the dim religious light which other men find refreshing to their souls; that he has the idea that no two trees should touch, not even with the terminal twigs of their most widespread branches, but that each tree should stand alone and apart, like the planes on the Thames Embankment, bathed in sunlight from its crown to its roots. And this would seem to be his ideal in the portion of the Gardens which he has taken in hand. Unfortunately, in many instances the finest trees are taken, the meanest in appearance left. It is curious to note one thing—the extraordinary rapidity with which a tree cut down is cut up and taken away, and the cavern left by the grubbed-up stump filled up and smoothed over. Where a group of a dozen trees existed last week, three or four will be found to-day, and there will not appear so much as a twig, or a chip, or a little loose

mould to show that anything has been changed. In some cases the stump, with the roots attached, is taken to another part of the grounds and replanted, with the roots uppermost, in some open space. Scores of these unsightly objects, looking at a distance like gigantic black mushrooms, may be seen scattered about the more open grounds. It is said that the intention is to cover them with ivy, and that in years to come, when the ivy has grown, they will show as dark green discs on the light green turf, and will then have a rather pretty appearance. Alas, that Kew Gardens, the most precious of London's green places, and last haunt near London of the nuthatch and jay and nightingale, and many another species, should have fallen into such hands! Each one of these hideous black stumps with upturned roots, which are intended to look pretty bye-and-bye, represents not one, but scores of lost trees; and one living tree is worth a million of such ornaments to nine hundred and ninety-nine in any thousand persons. But—alas! again—the thousandth happens to be Mr. Thiselton Dyer."

BIRDS IN WANSTEAD PARK.

THE herons were very busy and very noisy in Wanstead Park on the lovely afternoon of April 8; curious hisses, snores, and grunts, as well as loud trumpet-like calls proceeded from the neighbourhood of the tall trees on the island where the heronry is situated. Once a heron alighted right on the top of a sitting rook, to the considerable astonishment of both, but the rook sidled off, as far as could be seen, from between the heron's legs, and then gave the intruder a piece of her mind from an adjacent tree top. Whether the long-legged one had made a mistake, or whether he perched there intentionally will never be known, but presently off he shambled to his own much larger structure, and the outraged corvine was soon sitting again in comfort. Another heron, or perhaps the same one, was seen later on fleeing precipitately from the vigorous onslaught of an irate rook, and it was very curious to see such an ungainly-looking bird twisting and turning to avoid the numerous branches, but succeeding better than one might have expected. There must be a considerable number of them nesting there again, and any bird lover wishing to get a good view of the nests should pay a visit to the Park at once before the leaves are fully out; otherwise nothing of the heronry will be visible but an occasional old bird flying over—and even now with the horse chestnuts in leaf the nesting trees are hidden somewhat.

A secluded corner of the lake formed a perfect picture for all such bird-lovers as myself, and considering the close proximity of London the number and variety of the birds was little short of wonderful. All around, the trees and undergrowth came almost to the water's edge, with here and there a clump of rushes, or a bit of grassy bank, with the green stars of the wild hyacinth nearly hiding the ground under the shelter of the bushes. Right in the centre of the vista at the back of the water was a tree larger than those surrounding it, and amongst

its branches were four herons' nests, each guarded by one of the old birds, with another heron perched on the very tree-top, craning its neck and evidently ill at ease from some cause. Overhead were rooks' nests, some with sitting birds, but none, so far as could be seen, with youngsters of any size, and every few minutes a wood pigeon would shoot high up into the air and descend on quivering pinions to his mate hard by. Presently a magpie, which is the very first the writer personally has seen near London, came down to wash, and after three or four good dips up he went with the characteristic flirt of the tail into the thickest of the underwood, making the whole neighbourhood ring with his rattling cry. Sitting as motionless as lilies on the still waters, but watchful withal, were several mallards and one wild duck, with a moorhen busy collecting sticks for his nest, which was being built by his mate on a sapling blown down by the wind with the top resting on the water. All this with the joyous singing of the skylark overhead, the clear whistle of the thrush, the alto-flute of the blackbird and the merry lilt of the chaffinch went to make up a picture which carried one far from the sordid life of the city so near, until the spell was broken by a wandering party of typical East-enders, and then the singing of the birds gave place to a screaming concertina and strident voices shouting some popular song. Away went the ducks with a loud "quack" into the underwood, quickly followed by the moorhens, and even the rooks and the distant herons looked uneasy and seemed glad when the Philistines had passed on their way, and quiet reigned supreme again.

Nowhere else near London has the writer ever seen at one visit all the common southern members of the crow tribe, including the carrion crow, rook, jackdaw, jay and magpie, with their near relative the starling. Smaller birds, too, abound, and although on this occasion only the pretty little chiff-chaff was present, later on the coppices will be full of its congeners and melodious with their music. From fields close by came the well-known song of the yellow-hammer and the less common and curious note of the corn bunting, where a fortnight ago fieldfares were busy with other thrushes picking up an evening meal. Tits of course were present in full force, but then where is there an open space with a tree or two where they are not to be found, or at least the more plentiful kinds? Here at Wanstead were the whole five common species, with a pair of those delightful little birds, the goldcrest, in company, and so tame that they might almost have been captured with a butterfly net. It is to be hoped that the day is still far distant when the encroachments of bricks and mortar shall have scared away the wild bird life from Wanstead Old Park.

W. N. Rushen.

THE AMERICAN CROW.*

THE "rook question" has agitated the agricultural and ornithological mind in England for generations; and amateurs have done their best to come to the truth of the whole matter, without much success in inducing a general acceptance of facts. They could hardly expect much, having little weight of proof at their backs. Of help from Government they have had none. The British Government has never done much to meet the minor wants of country people, although (helped by the County Councils) it has lately taken to wasting money by sending (often raw and imperfectly equipped) lecturers into the villages.

In the States this sort of thing, at all events, is managed better. The Government Department of Agriculture takes up these questions and goes into them on a scale of magnitude which would be impossible on the part of amateurs. It has just investigated, and finally settled, the crow question of the United States. The crow of that country (*Corvus americanus*), is a different species from our rook, although the charges made against it are very much the same; it is therefore unnecessary to give even a *résumé* of the details of this admirable and voluminous report. It will suffice to quote a few statements from Mr. Merriam's Letter of Transmittal to the Assistant Secretary of Agriculture. The report is based on the examination of nearly a thousand crows' stomachs. After stating that all the most important charges brought against the crow—four in number—are sustained by the stomach examination, Mr. Merriam goes on to say that the extent of the injury is a very different matter. He writes:—"Leaving the young out of consideration, it may be said that in agricultural districts, about one-fourth of the food of crows consists of corn. But less than 14 per cent. of this corn, and only 3 per cent. of the total food of the crow, consists of sprouting corn and corn in the milk; the remaining 86 per cent. of the corn . . . . . is chiefly waste grain picked up here and there, mainly in winter, and of no economic value. In the case of cultivated fruits the loss is trivial. The same is true of the eggs and young of poultry and wild birds, the total for the year amounting to only 1 per cent. of the food. As an offset to his bad habits . . . . . insects form 26 per cent. of the entire food, and the great majority of these are grasshoppers, May beetles, cut worms, and other injurious kinds. . . . . To the same side of the scale must be added the destruction of mice, rabbits, and other injurious

* *The Common Crow of the United States.* By Walter B. Barrows and E. A. Schwarz. Bulletin No. 6, U.S. Department of Agriculture, Division of Ornithology and Mammalogy. Washington: Government Printing Office, 1895, pp. 98, large 8vo, plate and 2 text figures.

rodents by the crow." The letter concludes with these words: "It is clear that the good exceeds the bad, and that the crow is a friend rather than an enemy of the farmer." The detailed report, it is needless to say, fully bears out these conclusions. It teems with most interesting and instructive matter, and its perusal may be strongly recommended to any one interested in economic natural history. In every way a model of what a report of this kind should be, it really seems disgraceful that in the old country we should be left in the position of wishing we had one like it.

O. V. A.

SHORT NOTICES OF BOOKS.

British Moths, by J. W. Tutt, F.E.S. (London, Routledge. 8vo. 5s.). Mr. Tutt takes rather an unfavourable view of his predecessors, for he says that there are only two books, those of Stainton and Newman, in which even the species are correctly named, and these are now quite out of date. His own book is a pleasantly written introduction to British moths, and his classification is less revolutionary than that lately proposed by Mr. Meyrick, for he commences with the true Hawk-moths and the bulk of the old Bombyces, after which he preserves the Noctuæ and Geometræ intact, though these are followed by the Deltoidæ, and the old Micro-Lepidoptera and various families included in the old Bombyces are all mixed up together. Mr. Tutt's classification is based on the real or supposed line of descent of the Lepidoptera. He completes his review of the British Moths with the Proto-Lepidoptera, including the genus *Eriocephala*, or *Micropteryx*, of which he says: "This group is supposed to be the most ancestral of all our moths, the mouth being furnished with jaws and other parts more like the biting than the sucking insects." The account given of the representative species discussed are good, and the tables given of the times of appearance, food-plants, &c., of the British species of the earlier families will also be useful. We regret, however, that the coloured plates are by no means up to the mark, and as regards the numerous and conflicting systems of classification which have succeeded each other so rapidly during the last months, prudent "collectors" and "practical entomologists" will hesitate to disarrange their collections until "scientific entomologists" are more agreed on, at least, the main details of an improved classsification.

W. F. K.

In the course of last year the remains of a notable Roman villa were excavated alongside the river Darent a few miles above Dartford. This interesting discovery has led Mr. Walker Miles—whose admirable series of guide books, known under the general title of *Field-Path Rambles*, have received frequent notice in this journal—to turn his attention once more to the perambulation of West Kent. In his recently published *Down by the Darent* (R. E. Taylor and Son, 19, Old Street, London, E.C., price 1s.), he has provided, *inter alia*, much useful information for the benefit of those who are inclined to pay a visit to the site of the villa. In addition to a number of cross-country routes between this spot and the nearest railway stations, Farningham Road, Dartford, Swanley and Gravesend—he has supplied a ground-plan of the structure and a brief sketch of what has been unearthed and an explanation of the part that is supposed to have been played by the several rooms in the economy of this ancient household. The other two sections of the book afford walking routes along the valley of Darent to its source at Westerham, and between the latter place and Sevenoaks, a district which, with its hop-grounds and commons, offers peculiar attractions for the pedestrian in the summer season. Two valuable foot-path maps give a welcome

completeness to the book. Ramblers will be pleased to learn that Mr. Miles has secured the assistance of a collaborator who, under the obvious pseudonym of "Alf. Holliday," will shortly begin the publication of a *Northern Heights* series; while Mr. Miles himself promises an early addition to his *Surrey Hedgerow* books.

A. GEPP.

SELBORNIANA.

A "Disagreeable Collection."—"G. B. S.," in the *Saturday Review* of March 21, thus expresses his views on "feathered women" at the theatre. The women who go to places of public entertainment in hats which effectually obstruct the view of the performance of those behind them, manifest in another form the same selfishness which induces them to sacrifice myriads of lives to their insatiable vanity. "The stalls were filled for the most part by quite the most disagreeable collection of women I have ever seen. They all wore huge towering hats, piled up, for the more effectual obstruction of the view, with every conceivable futility, vulgarity, and brutality (in the dead bird line) that a pushing shop-keeper can force on the head of a woman in whom conscience, intelligence, character, conviction, sympathy, and every other attribute of an active and awakened nature are represented solely by a dull fear of not being in the fashion. The person who would have prevented me from seeing the stage if I had not fortunately occupied a projecting corner seat, actually had two sea-gull's wings in her hat, stained crimson at the insertion, so as to make them appear as if freshly torn from the living bird. I wonder whether, if a Sioux or Huron Indian, with feather headdress and array of scalps complete, were to present himself with a stall-ticket, he would be permitted to sit out the performance; or is the privilege of not only obstructing the view, but making all your commonly humane neighbours feel sick every time they look at you, confined strictly to women? Surely it is bad enough to see egret plumage waving all over the place, and reminding you at every quiver of the slaughter of great numbers of exquisitely pretty birds in order to make a few dozen trashy shop-window hats, without also having to endure imitation blood-stains on dismembered limbs."

Box Hill: the "Thin End of the Wedge"?—On Easter Sunday a friend told me an alarming rumour—that Box Hill had been selected by the Government for the site of a military fort, and that the noted wood of box trees had already been cut down. Next day I went to see for myself. Undoubtedly the beautiful and commanding hill offers a splendid position for military defensive purposes, and its choice may help to prevent the "battle of Dorking" from ever becoming a matter of history. I will not attempt to adjust between the respective claims of army experts and their protective plans upon the one hand, and a nature-loving public and its enjoyment upon the other. But as a Selbornian I cannot do other than lament the necessity—if such it be—which has doomed so charming a spot to be so ruthlessly invaded, and for such a purpose. The fort is to be built, undoubtedly. A portion of the hill has been sold to the War Department for a site. Some acres of the box wood have already been cut down, and the space is being cleared. This space is a circular one, and it is entirely within the wood, so that the destruction is not perceptible from without. The circle is at the back of the keeper's house and garden—that on the Dorking front of the hill—and just touches the garden railings. I was informed by one of the men, apparently in charge of the spot, that it is not intended to interfere with the surrounding belt of trees, and that the margin of the hill, which has afforded so delightful a series of points of view to so many generations of visitors, will remain unaltered. Thus far no view-point—indeed, no spot accessible hitherto—has been touched at all. But what will be the case when the fort is actually erected, and a garrison with its needs becomes a permanency? A similar station, it was stated, is in forward preparation at Reigate; and another will soon be commenced on Bedford Hill, the next ridge to Box Hill northward. As I have already said, nothing of what is going on here is visible from outside of the wood—nothing till the cleared circle

itself is reached. It of course follows that the noble picture presented by Box Hill as seen from Dorking, Burford Bridge Station, or indeed anywhere in the neighbourhood, continues unspoiled. But again it has to be asked—what when the fort and its big guns are there? Justify the appropriation as we may, Box Hill can never be the same again.

WILLIAM WHITWELL.

"Object Lessons" (p. 38).—We are glad to announce that, in response to the representations of the Society for the Protection of Birds and other bodies, the following paragraph appears in the "Revised Instructions" (1896) issued to H.M. Inspectors by the Education Department:—

"It is very desirable that such courses should include lessons on animal life, but you will discourage, so far as you possibly can, both in infant schools and in schools for older scholars, the killing of birds and other animals and the purchase of stuffed specimens to be placed in the school museum. The charm of a lesson given to young children on animal life lies in the observation of the movements of the living animal and in its adaptation to its usual surroundings. The wanton sacrifice of life should by itself be a sufficient reason for discarding the use of stuffed specimens. But you should also point out the uselessness of their employment in object lessons, they generally exhibit but feebly the structure and habits of the living animal, and awaken only a languid interest in the minds of the scholars. The same arguments apply, though with less force, to tame animals. Our English song and other wild birds, such as thrushes, larks, and starlings, should never be kept in cages; and unless its happiness is secured (as is possible in the case of canaries and animals born in captivity) a caged animal should not be kept in any school."

Cats and Birds (pp. 56, 77).—I think Mrs. Turle has quite overlooked the fact that my letter did not deal with the morality of keeping wild birds in cages, but with the method of training a cat to birds. If Mrs. Turle had had the experience that I have had with rats and mice she would certainly not advance the theory of trapping, as she would find it did not answer in practice. There is no substitute for the cat but poison, and I think rats and mice ought to have their due amount of sympathy as well as the birds.

J. W. H.

Plant Protection in Switzerland.—The *Athenæum* for April 18 says: "The measures taken in Switzerland for the protection of the 'edelweiss' and the 'Alpen-rose' are now extended by some communes to other plants. The Common Council of Andelfingen, in the east of Switzerland, and that of Bex in the west, have prohibited the gathering of *Daphne Cneorum*, *D. alpina*, *Iberis saxatilla* (*sic*), and *Lunaria rediviva*, under a penalty of 10 francs. In both communes the fines are allotted to the commercial school fund."

NATURAL HISTORY NOTES AND QUERIES.

A Collie's Sagacity.—Some friends of mine residing in a neighbouring villa, some years ago possessed a handsome black and tan Lammermoor collie. Rover was a very sagacious dog, and a very privileged one too, for he not only slept in the room of his master and mistress, but when morning came and his mistress awoke, he was allowed to come upon the bed. He was a good house-dog, never allowing anyone to enter the garden gate at early or late hours without informing the family, intimating the matter with loud barkings. One dark early dawn in mid-winter, the frost having been exceptionally sharp, the windows of the bedroom were designed all over with lovely mosaic fern-patterns. Someone entered by the garden gate; Rover, curled up and warmly buried in the soft eider-down quilt, instantly sprang up, rushed to the door, which, being shut, he as quickly sprang to the window. The thick rime prevented his seeing the in-comer, but with quick intelligence he licked a large round hole in the frosted glass, and put his eye to the space he had cleared, to view the supposed intruder.

Torquay. L. F. S.

London Birds (pp. 33, 57).—A pair of dabchicks (wild birds) nested last year in one of the small lakes in Clissold Park, Stoke Newington. The birds were first noticed in the middle of June by Sergeant Charles Kimber, of the London County Council Police, who is a keen observer—having had many years experience as a gamekeeper—and takes considerable interest in natural history. After building two nests, which were discarded, the dabchicks constructed a third, close to an island in the centre of the water, in which two eggs were laid. The position chosen was near to where a boat is moored which is in daily use, and whenever this occurred, the old birds hurriedly covered the nest with leaves and weeds so that the eggs were concealed, and then withdrew to a safe distance. Eventually, about the end of July, two young ones were hatched and duly reared.

H. CHIPPERFIELD.

Naturalizing Squirrels.—Can any of your readers tell me from experience if it would be possible to naturalize squirrels in a neighbourhood where there are no beech trees? We have no large trees in our garden, but in a meadow adjoining there are several oaks and some magnificent elms. Do squirrels eat the fruit of either of these? I would not keep them if they had to depend entirely on a daily feeding of nuts, &c. Are they easy to tame? There is a nice little wire house in this garden, which has evidently been used as an aviary. I think it might be possible to keep a pair of squirrels in there for a time until they were sufficiently familiar with their surroundings not to get lost, but of course I want them to be free eventually. Would they do any damage to the fruit, or gnaw the bark of apple and pear trees?

JULIA C. TEBB.

A Grateful Dog.—If gratitude were banished from mankind it would yet be found in the canine race. "A student of the third year at the Faculty of Medicine in Nancy, born at Plombières les Bains, saw lately passing before his door a big dog, walking painfully upon three feet, the fourth being broken and hanging above the ground. Moved with pity the young man tended the poor beast, which readily allowed him, and, with the paw enveloped in bandages, the dog, hobbling along, took the road home, where his master was much astonished to receive him in this sad plight. The dog recovered, and mindful of this kind action never failed, each time that he met the student, to run to him and bestow upon him many caresses, to the great astonishment of his friends. Ill fate unfortunately attended the poor animal. One day when the student was at the civil hospital, he had to go to the kennel where are generously housed wandering dogs put by for experiments by the faculty, and what was his surprise to recognize amongst the bow-wows of all sorts and sizes, his dog of the broken foot. He hastened to request his liberation of the head doctor, who granted this with very good grace, and the young student became the object of the joyous demonstrations of the poor animal, so happy to testify to him by his bounds and caresses the gratitude that he felt for his benefactor." The above is from a recent number of the *Indépendance Belge*.

GILES A. DAUBENY.

Single Rooks' Nest.—Probably the observation is not worth recording, but I observe that Gilbert White in *Selborne* remarks:—"If a pair (of rooks) offer to build on a single tree, the nest is plundered and demolished at once." We have lived here now two springs and have a small rookery at back and front of the house. There are four separate trees, three on one side, one on the other, and each with one solitary nest in it. The adjoining trees have many nests, one I believe fourteen in it and others a good many. The nests are all, I believe, occupied, and two families appear especially vigorous and flourishing, and as far as I can see the others are active and busy. I have not observed any desire on the part of other birds to molest them.

Baldock, Herts. SOPHIA G. NEWMAN.

[Please read Rule 4.— ED. *N.N.*]

Another Note on Rooks.—I should like to mention a somewhat singular occurrence which has just taken place here. Some forty years ago Southampton was noted for its splendid avenue of noble elm trees, which reached for nearly half-a-mile from the Ordnance Survey Office to what was known as the first Common Gate. Since then, owing, I believe, to laying down gas pipes, the roots

of these splendid trees were very much injured, and the elms died off year by year till there are now only four or five left near the Ordnance Office above referred to. Passing by these fine relics of the past glorious avenue one afternoon last week, I heard the "caw, caw" of a rook, and looking up I saw, to my great surprise, a pair busily engaged in preparing their nest on one of the topmost branches. Such an incident has never occurred here before—within my memory at least, now extending over many years. I expressed my surprise to a cabman who was standing by the stand on the opposite side of the road, and asked him about the matter. "Well, sir," he replied, "the rooks are going to build; there is another nest just above. A number of rooks flew about here a day or two ago, and seemed to be holding a consultation, and after much excitement they flew away again, and the next morning a pair came and brought some odd sticks, and soon fixed up a nest in this first tree, and another pair took the other tree." He suggested as a reason for this strange freak that possibly some of the trees in a neighbouring rookery had been cut down. Whatever may be the reason of this singular movement on the part of our black-coated friends, I hope the nesting will not be disturbed, and that later on we shall have the pleasure of seeing the young birds surveying us as we pass along on the top of the tram-cars. If these birds rear their young successfully, I quite expect that next year there will be fresh incursions, and the nucleus of a rookery will be established. I may mention that it is a very busy road at this point, and at dinner-time and at the close of the day's work, three or four hundred men employed at the Ordnance Office pass to and fro.

Southampton. C. S. STRICKLAND.

TO CORRESPONDENTS.

J. C. T.—Your letter, dated March 23, reached us in April, too late to comply with the request it contained. But the request should have been made to the Secretary (see rule 5), and the address to which it was sent was not even that of the Editor (see rule 4). We cannot express regret for any inconvenience which may arise from the neglect of the directions to correspondents which are plainly given in every number of NATURE NOTES.

C. R.—*Acer platanoides.*

WE must request those who favour us with their communications to observe the following rules. We cannot undertake to notice the contributions of any who fail to comply with them.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Annual Meeting and Conversazione, 1896.—This will be held on Thursday, May 7, at the Society's Rooms, 20, Hanover Square, W., from 7.30 to 10.30. The Annual Meeting will commence at 8. It is hoped that Sir John Lubbock, M.P., F.R.S., will be present and will take the Chair. Mrs. Brightwen and Sir William Flower, F.R.S., F.Z.S., will also be present. There will be an exhibition of objects of interest. Selbornian subjects will be illustrated by the lantern, under the superintendence of Mr. Ravenshaw. Music and light refreshments.

Tickets of admission are sent to all members with this month's NATURE NOTES. Application for further tickets, the supply of which is limited, should be made to the Secretary, and a stamped addressed envelope should be enclosed with each application.

The May Council Meeting will be held on Tuesday, May 5, at 5.30, instead of on May 7, the latter being the day of the Conversazione.

Council and Committee Meetings.—The next meetings of the Council will be held on May 5 and June 4, at 5.30; and of the Magazine and Leaflet Committee on May 21 and June18, at 5.30.

Field Club Saturday Rambles:—

May 2.—Meet at Thornton Heath Station at 2.32 (Victoria 2.7, London Bridge 2.3). Inspect Dick Turpin's house; tram and walk to Beddington by Mitcham Common. Return fare, 1s. Guide, Mr. E. A. Martin.

May 9.—Meet at 3.9 at Castle Hill Station, Ealing (G.W.R.). Thence to the Ballot Box, *viâ* Perivale Wood, returning to Hanwell Station (G.W.R.) *viâ* Greenford. (Paddington 2.50, Willesden 2.52.) Mr. Ravenshaw to guide.

May 16.—Meet at Hounslow Station (S.W.R.) at 3.6. Thence to Gravel Pits; banks of Crane; returning from Twickenham. (Waterloo North Station 2.30, Clapham Junction 2.40, Kew Bridge 2.57.) Mr. Field to guide.

May 23.—No ramble. Saturday before Whitsuntide.

May 30.—Meet at High Barnet Station at 3.4. Thence through Barnet to Hadley Woods. Return fare—King's Cross, 1s. 6d. (Moorgate Street Station (G.N.R.) 2.15, King's Cross, Met. (G.N.R.), 2.23, Finsbury Park 2.35.) Mr. Carpenter to guide. If ten or more members will meet the hon. sec. of the Field Club (Miss E. J. Temple) at King's Cross, Met. (G.N.R.) booking office at 2.10 p.m., a reduction of fare can be obtained by taking all the tickets together.

BRANCH CONTRIBUTION.

Clapton (Lower Lea Valley)	...	...	...	£1 6 3

NEWS FROM THE BRANCHES.

Clapton (Lower Lea Valley.)—The last of the winter Social Evenings was held on Saturday, March 7, when Mr. Ferdinand Coles, vice-president, gave a very interesting paper on "Mosses," illustrated by numerous specimens, chiefly from the Epping Forest district, and exhibited some excellent microscopic slides. Mrs. Percy Myles also kindly exhibited some excellent drawings illustrating the same subject. The meeting closed with the usual vote of thanks to the lecturer and friends, who contributed to the musical portion of the evening's entertainment; also to the Misses Barlow for kindly permitting the use of their school-room during the session. (This notice was unavoidably held over from last month's number.)

Croydon and Norwood.—On April 11, the hon. sec. of the Branch lectured at the Thornton Heath Polytechnic upon "Great Britain under an Ice-Cap."

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

No. 78. JUNE, 1896. Vol. VII.

A DRY NEW ZEALAND SUMMER.

ALTHOUGH it is generally supposed that New Zealand has a much smaller rainfall than Britain, this is not so; along a great stretch of country on the east coast of the North Island the rainfall is heavy and the wet days frequent.

For instance, during the past year I registered on four occasions in the twenty-four hours 5· inches, 5·17, 5·70, and 7·30, and as much as 16·30 in one month. After four or five successive wet summers in the very broken lands of this district, the shaded ravines and valleys and the cold southward-facing slopes become quite unfit for grazing purposes. The growth of low shrubs, such as manuka (*Leptospermum scoparium*) and tauhinau (*Pomaderris ericifolia*), stunted fern and long rank grasses provides shelter and harbour to all sorts of sheep parasites.

The number of sheep, too, is lessened, or they are carried on a restricted area, thereby increasing the sheep sickness of the soil. All these—and they are serious evils in climates where frosts are rare and light—are remedied by a few weeks of unbroken hot dry weather.

Sometimes the drought sets in after a last heavy flood, and sometimes the weather steadies slowly down after diminishing thunder showers. Southerly gales that rush up without an hour's warning, instead of—as in wet seasons—bringing sudden deluges, now carry only a skiff of big drops and a sudden breath of coolness, or at most a few points only of rain. A crack of clear appears to the windward, and the scurrying clouds pass away once more into blue. Then, as the weeks go on, the rain seems to find it more and more difficult to reach the earth.

Time after time heavy dark lowering clouds roll up from east and west and south, only to threaten and disappear, leaving the drought strengthened and harder set than ever. Sometimes, though less frequently, the hills are wrapped for a few hours in fog, ending oftenest in intense heat.

As the grass becomes brown, and the sheep tracks work up into holes here and there of powdered dust, appear plagues of fleas, or "little strangers," as the Maoris elegantly call them. The summer, too, grows musical with the black crickets' night cry. These crickets are supposed to have come over either from Fiji in fruit cases, or else with the regiments sent across from India in the days of our native difficulty. Mr. Colenso tells me he believes the former the more probable.

In the gaping fissures of the heavy alluvial flats they swarm in millions, scuttling off for safety at the sound of a footstep, or pouring like water into the yawning gaps. They crop the grass to the very ground, and nibble besides many kinds of fruit-bark, leaving the trees skimmed as if snow-starved rabbits had been at work. They will eat also coats, boots, and wall paper. They, with small grasshoppers, cicadas and great clumsy locusts, provide an ample feast for the wild birds, and ducks, fowls and turkeys can hardly move, so crammed are their bursting crops. On the hill-tops, too, the flying ants make the shepherds' lives a burden to them.

Round the whole horizon enormous high towering pure white clouds rolled in eddying convolution rise into the calm air, and day after day these appear and re-appear. Sometimes sultry nor'-westers steal in heat over the quivering fields, the air becomes heavy with smoke, and the sunlight red and weird. The panting sheep draw together on the open plains, and in circles seek each other's shade, their lowered heads in the centre of every ring. The stamping cattle stand or lie in the karaka's sombre shade, or whisk off the troublesome flies in the deepest bush.

Oftener, however, in westerly weather on the sky line a few thin blown clouds appear, sharp shaped like jagged peninsulas of thawing ice, or backed and curved like snowdrifts lingering late in spring. Later, in intermittent gusts, the gale breaks. The birds retire to more sheltered spots, and the sheep to the lee of rocks and scrub. The warm fierce stream of wind floats the willow's weeping droopers parallel to the earth, or shakes and flaps the long streamers like flags, blackening the leaves and withering the fresh silky tips. The garden blossoms become flaccid and limp, and the tender tendrils of the bush vines droop. From every road and river bed the dust blows like a forest fire.

More rarely in a nor'-westerly gale the clouds are shaped like great twisted bakers' rolls, and follow each other pretty regularly across the sky. With such clouds in the air the gale usually ends in a smart shower, the first great drops hissing on the

parched ground and fading like shade, or if heavier making the thirsty land smell for an hour like a hothouse watered at noon. Even heavy showers, however, are immediately absorbed, and as the drought is prolonged, coils of smoke arise on all sides, and every hill seems a little volcano, dense chocolate-brown from the felled forest, black and harsh from the manuka, and cowslip-coloured from the fern.

First in order come the fires of winter, fallen forest lands, and those who have risked the possibility of rain, and delayed putting in a match, get in such a dry season wonderful clean burns, boughs, branches, and even the smaller trunks being quite consumed, and their former position marked only by lines of thick grey ash. The very largest boles smoulder on for weeks, the fires gouging and chiseling their mass like burrowing grubs in a rotten stump. Dead trees are always untouched in a felling contract; and the hollow, funnel-like trunks of the parasitical rata, where the wild bees have swarmed for years, are alight for months, roaring in the dry gales, sending up faint blue smoke columns in calm, and smouldering all but extinct in rains. When the lumber has been thoroughly dried, it is wonderful with what celerity hundreds of acres of fallen bush are consumed.

The match dropped blackens a shrivelling leaf or two, and for a few moments the flame feeds silently on the brown, rolled, heat-curled leaves. Then a little circle forms, the edges aflame with tongues that flicker and reach; then a first hurrying gust drops down and flattens the flames, and rolls them backwards and forwards, fiercely rocking and fanning the tiny fire, and at times seeming almost to extinguish it.

Smoke begins to rise; the flames begin to create a draught; the fire bites deeper into one blackened edge; the circle is lost in an obtuse cone, that again narrows into a fiery wedge, that rushes and leaps before the rising wind, and singes the higher branches and sweeps along in a long, steady roar, preceded by pungent smoke, and incandescent leaves and showers of fiery sparks. Then, in a roar—like the roar of the sea—and a crackle like musketry, the flames disappear in the low-driven smoke, one breath of which clutches the throat, and causes the foot to be stamped in choking pain. Through the dun atmosphere the high blaze of the standing trees is indistinct, and hardly brightens the smoke gloom, and in a few moments the fire has rolled on, and the open ground is cumbered only with charred logs that redden to fire in the breeze and whiten to smoke in the lull.

Very characteristic of the New Zealand bush are the huge trees that, dead and bare, top the younger forest growths. These, too, even in the green unfallen bush, are lit by the sparks that fly for hundreds of yards, so that here and there in the standing forest also rise columns of smoke. These fires are very destructive to animal life, and after a fire of three or four hundred acres of bush, scores of pigeons, wekas, fantails, and

other small birds are found destroyed. Spring fern fires, too, destroy numbers of pheasants' nests, especially along the edges of the small wooded ravines, where the birds prefer to build. But the grass fires—much more difficult to obtain—are destructive too. Only in extra dry seasons will fires run over the hills. Stocking, to some extent, prevents the grass running at once to seed. The dews are often heavier; the shade of scrub keeps the ground moist. Thunder-showers, too, are more frequent on the hills. When, however, the hill grass will carry a fire, fern birds, lizards, and mice are killed in great numbers; and for days after the heavy flapping harriers may be seen searching carefully the blackened saddles and slopes for little creatures scorched by the flames. Pigs and sheep, too, are sometimes burnt—not often, however, for pigs rush down into the deep brooks, and sheep take refuge on the close-cropped hill tops.

By the time, however, that the hills can be successfully fired, there is a cry for rain that increases as, night after night, the sard sun sets—a burning blood-red ball, low on the dun horizon. The tanks are empty; the roads inches deep in pounded, powdered dust. The scorched hills are black, and the last trampled swamp grasses brittle and brown. The open water-courses are perfectly dry; the forest brooks chains of isolated pools, full of scum and rotting forest leaves; and the hardiest stock begin to fall away. Then at last, perhaps, after ten or twelve weeks of drought, up comes a slow, almost windless sou'-wester, trailing mist wreaths over the hills; then wrapping them low and lower in a blanket of fog. This presently increases to a drizzle, that drums delightfully in the empty tanks, and trickles less delightfully through the shrunken shingles of the roof. The wind increases, and the rain descends more and more heavily, until at last a furious gale is blowing, and torrents pouring down. The ground is soaked once more, the drought is broken, and almost before the water has run off, tender green needles and sharp little blades are piercing the softened crust of the warm, wet earth.

H. GUTHRIE-SMITH.

Rooks at Lyme Regis.—While staying at Lyme Regis lately, we were much struck by the tameness of the rooks. Two of the lodging-house keepers on the sea-walk throw out scraps of bread, &c., for them every morning throughout the year, and they come down to within six or eight yards of the houses and fearlessly enjoy the feast. They seem to be on excellent terms with the sea-gulls also, joining their foraging parties, and picking up many an "unconsidered trifle" close to the in-coming tide, but the rooks do not like getting their feet wet, and when the little wavelets run up near their toes they retreat with two or three comical hops, like frightened children. Lyme Regis seems to be an excellent place for birds of various kinds, and many a happy hour I spent with my glasses, watching them in the "Pinny Cliffs," a mile from the town, where the trees and bushes which cover hundreds of acres form a real paradise for them. Blackcaps abound there—from nearly every bush one could hear their lovely song. Woodpeckers, also, and many other interesting birds are to be found in plenty.

Horsell Vicarage, Woking. ROSE TURLE.

"WIDEAWAKE FAIR."

WHILE at Ascension I visited "Wideawake Fair," a description of which will, I am sure, interest your readers.

The wide awake (*Sterna* is a kind of sea *fuliginosa*), swallow a graceful black-and-white bird about as big as a dove, but more slender in the body, with long pointed wings, a long black beak and small webbed feet. Their eggs, which are mottled like a gull's, are out of all proportion to their bodies, being nearly, if not quite, as big as an ordinary hen's egg. The eggs are very good eating. It happened to be just the very height of the breeding season when we were there, which was a stroke of good luck, so we started off, preceded by a marine to put us on the way, and after a four-mile walk over pulverised brick dust and extra roughened clinkers, warranted to tear any boots to ribbons in twenty minutes, we arrived at a ridge overlooking a barren valley, the upper portion of which was rocky, and appeared to be strewn with white pebbles, while the lower portion consisted of a flat sandy track apparently scattered over with black stones. Here we were met by a few stray wideawakes, who came flying round our heads, screaming and pecking at us, and hitting us with their wings. As we went on they got more and more numerous until we reached the speckled ground I have mentioned, which proved to be the laying ground of the wideawakes, the white on their bodies showing up against the dark rocks, and the black against the white sand. I cannot attempt to estimate their numbers; the ground was simply covered with them and their eggs, which were laid on the bare rock or sand, with no attempt at any kind of nest, at intervals of certainly not more than a yard apart. Ten thousand dozen *fresh* eggs have been collected in a single week, which will perhaps give you some idea of their numbers. On each egg sat a wideawake, indignantly refusing to move, but screaming and pecking at our hands or our boots when we attempted to turn them. How they manage to hide their large eggs beneath their little bodies I do not understand, nor do I see what earthly use it can be for them to sit upon them at all, especially during the day, when it can add but little, if anything, to the warmth of the sun. I suppose, however, that it is really to protect them from the sun, the direct rays of which would probably be more likely to roast than hatch the chicken.

If you walk through them rapidly, so that they must either move or run the risk of being trodden on, they rise round you in a perfect cloud, flapping you with their wings, and pecking at you so that you have to protect your face with your hands. They are not allowed to be killed, so that they are utterly fearless. You can pick them up in your hand, or threaten them with a stick; they are exceedingly indignant, but not the least frightened. The chickens, which are like little grey fluffy balls,

appear to be somewhat neglected by their parents, and if they approach too near their neighbour's territory, get pecked and even killed by them. We saw this happen several times, but no parent bird put in an appearance to protect or avenge her offspring. The puzzle, however, is how any of them can possibly remember which is their own egg, or recognise their own chicken.

G. H. P. B.

THE MIGRATION OF A CRANE.

THE following extracts are taken from Slatin Pasha's exciting account * of his fighting and captivity in the Soudan. During his captivity at Omdurman, a town on the left bank of the Nile and almost immediately opposite Khartoum, the following event occurred (see p. 497).

"One day, in the month of December, 1892, when I had just left the Khalifa's door to take a short rest, one of the mulazemin summoned me to the Khalifa's presence. I found him in the reception room surrounded by his Kadis, and the threats and reprimands which I had received on the occasion of Taib Haj Ali's calumny were still fresh in my mind. I was, therefore, considerably dismayed when the Khalifa, without returning my salute, ordered me to take my seat amongst the judges. 'Take this thing,' said he, after a short pause, and in a very severe tone, 'and see what it contains.' I at once arose and took in both hands the object he gave me, and then sat down again. It consisted of a brass ring of about four centimetres in diameter, attached to which was a small metal case about the size and shape of a revolver cartridge. An attempt had been made to open it, and I could plainly see that it contained a paper. This was indeed an anxious moment for me. Could it be a letter from my relations, or from the Egyptian Government—and had the messenger who brought it been captured? Whilst I was engaged in opening the case with the knife which had been given me, I turned over in my mind how I should act, and what I should say; and, as good luck would have it, I had not on this occasion to have recourse to dissimulation. Pulling out two small papers, and opening them, I found inscribed on them, in minute but legible handwriting in German, French, English and Russian languages, the following:—

"'This crane has been bred and brought up on my estate at Ascania Nova, in the province of Tauride, in South Russia.

* *Fire and Sword in the Soudan*, by Rudolph C. Slatin Pasha, C.B., translated by Major F. R. Wingate, C.B. (Edwin Arnold: London and New York.)

Whoever catches or kills this bird is requested to communicate with me, and inform me where it occurred.—(Signed) F. R. Falz-Fein. September, 1892.'

"I now raised my head, which hitherto I had kept closely bent down; and the Khalifa asked, 'Well, what do the papers contain?' 'Sire,' I replied, 'this case must have been fastened to the neck of a bird which has been killed. Its owner, who lives in Europe, has requested that anyone who finds the bird should let him know where it was caught or killed.' 'You have spoken the truth,' said the Khalifa, in a somewhat more amiable tone; 'the bird was killed by a Shaigi near Dongola, and the cartridge case was found attached to its neck. He took it to the Emir Yunes, whose secretary was unable to decipher the writing of the Christian, and he therefore forwarded it to me. Tell me, now, what is written on the paper?' I translated the message, word for word, and, at the Khalifa's command, also tried to describe the geographical position of the country from which the bird had come, and the distance it had travelled before it was killed. 'This is one of the many devilries of those unbelievers,' he said at last, 'who waste their time in such useless nonsense. A Mohammedan would never have attempted to do such a thing.'"

"He then ordered me to hand over the case to his secretary, and signed to me to withdraw; but I managed to take one more hurried glance at the paper—Ascania Nova, Tauride, South Russia, I repeated over and over again to imprint it on my memory. The mulazemin at the door anxiously awaited my return; and when I came out from the presence of my tyrannical master with a placid countenance, they seemed greatly pleased. On my way to my house I continued to repeat to myself the name of the writer and his residence, and determined that, should Providence ever grant me my freedom, I should not fail to let him know what had happened to his bird."

I cannot here give an account of Slatin Pasha's escape from his long captivity: of his rapid camel ride across the desert, of his hiding in the Giuf Hills, of his hopes and fears, his excitements and escapes. For this his own narrative must be consulted. Suffice it to say, that in the spring of 1895 he made his escape, and was received in Cairo with enthusiasm. On p. 618 he says:—

"A few days after my arrival, when seated on the balcony of the [Austrian Diplomatic] Agency, and looking down on the garden all fresh with the verdure of spring, I espied a tame heron stalking across the flower-beds. Instantly I thought of Falz-Fein of Ascania Nova, in Tauride, South Russia, and I hurried to my room, and then and there wrote to him a full account of the crane which he had released in 1892, and which had been killed in Das Shaigia. It was the greatest pleasure to feel myself in a position to give the former owner of the bird an account of what had happened; and soon afterwards I received

a reply from Mr. Falz-Fein, who possesses a large estate in the Crimea, thanking me warmly for my letter, and inviting me to pay him a visit, which, unfortunately, the numerous calls on my time have hitherto prevented me from accepting."

A. F.

LOVE LIES BLEEDING.

IT was in an old-fashioned Richmond garden that I saw the drooping crimson plumes of the amaranth (*Amarantus caudatus*). There were high red brick walls to this garden, and upon them were trained fig trees with spreading, jagged leaves and grey-green stems, wistaria, vines and jessamine. Every May the wistaria blossomed out in delicate profusion, pale purple, grape-like clusters of flowers lying against the deep redness of the walls; and a little later on came the white, sweet-smelling flowers of the jessamine, shining in small starry constellations among the tall green masses of closely growing, fine foliage. Beneath ran long flower beds where perennials and hardy annuals bloomed almost constantly, and in the middle of the lawn, with the clump of yew trees sheltering it upon the northern side, were other beds, where roses grew in abundance—monthly, moss, damask, and deep crimson, loose-petalled, single ones.

But it was in one of the side beds that the sweeping tassels of the amaranth were to be found. It was here that the scarlet lychnis blossomed every summer, as it had doubtless blossomed for the last hundred years; that grey lavender lifted "spikes of azure bloom," and strange marvels of Peru opened sweet evening flowers; whilst clumps of lilies rose up, year after year, tall, white and gracious, by the side of sturdy marigolds, with their glowing haloes of ruddy petals.

Great straggling bushes of rosemary grew at the further end, in an arid, stony corner, and I never passed down the box-bordered path without pressing the fragrant, wholesome-smelling leaves. The "rosemarine" of Shenstone's cottage garden—

> "That whilom crown'd
> The daintiest garden of the proudest peer,"

was as great a favourite with me as it was with the old school-mistress, and often the lines of a modern poet came into my mind as I watched the frail blossoms appearing beneath the dark, narrow leaves with their underside of grey.

There was something so sweet, modest and unpretending about those delicate, half-hidden flowerets; and the dull colouring of the encircling leaves was also so closely connected with pleasant, health-giving properties, that the whole plant had a beauty of its own in my eyes—an indescribable charm!

"For in the rain or sun,
Cloaked all in modest gray,
This garden nun
Doth stand as though to pray.
Content, she never heeds
If flaunting poppy scorns,
Nor marks that weeds
Do tear her gown with thorns;
She tells her beads,
And lives her life with joy,
Her one employ,
To fill some small, sweet needs!"*

But it was not the rosemary that I intended to speak about, it was only that I could not think of the amaranth without also thinking of its nearest neighbour, and it was just beyond the rosemary bushes that the seemingly self-sown plant yearly waved its sombre spikes of flowers. *Amarantus caudatus* — I think it was partly the poetical ring of the high sounding name that first attracted my attention, as well as a certain wonder at the luxuriance of the unlovely leafage, and the persistent appearance of those drooping trails of flowers. But I remember that when its banishment was contemplated, I pleaded warmly that it might be allowed to remain. I had grown to be fond of the strange plant; and who would willingly destroy a flower of which the poets have always sung?

It was indeed, quite impossible to connect any thought of immortality with the rapidly-growing, rapidly-fading annual; but at least it was very pleasant to have so lofty a name amongst one's garden friends. And if one could not believe that Milton had the botanical *Amarantus caudatus* in his mind when he sang—

"Immortal amaranth, a flower that once
In Paradise, first by the 'Tree of Life,'
Began to bloom—"

one could at least imagine, easily enough, that it was no distant, classical everlasting; but one's own garden flower that took its place among other familiar flowers upon "Lycid's laureate hearse." The white, pink and pale jessamine were there—

"The pansy freaked with jet,
The glowing violet,
The musk-rose, and the well attired woodbine,
With cowslips wan that hang the pensive head,
And every flower that sad embroidery wears."

But it was the amaranthus that was bidden to shed all its mournful beauty in memory of Lycidas, and how fitting and appropriate would be those drooping crimson plumes. So the amaranth continued to flourish in my garden, and presently I began to call it by its other and more familiar name. I think it was after I had read Wordsworth's poem—his address to the love lies bleeding:—

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* *An Old Garden.*—Margaret Deland.

"You call it 'love lies bleeding'—so you may,
Though the red flower, not prostrate, only droops,
As we have seen it here from day to day,
From month to month, life passing not away:
A flower how rich in sadness!"

The Dying Gladiator, Adonis drooping beneath his death wound, were alike seen imaged by Wordsworth in his saddest of sad flowers as well as the lover:—

"Who first, weighed down by scorn, in some lone bower
Did press this semblance of unpitied smart
Into the service of his constant heart,
His own dejection, downcast flower! could share
With thine, and gave the mournful name which thou wilt ever bear."

One cannot, of course, be guided in these things only by a poet's fancy, but the feeling in regard to the amaranth appears to have been very widely spread. Among the old herbalists the amaranth is known as the floramor—the flower of love. It is always the flower of lovers, and although some modern writers think with Dr. Prior that the association of love with the amaranth came originally through confusion made between *amor* and *amar*, the beginning of the word amarantus, this seems to me both far-fetched and improbable. How much more likely that it was named from its aspect, its drooping sorrowful air, its blood-red mysterious colouring. As I looked a little further into the question the names given by the writers on sacred flower-lore seemed still to support this theory. To them the amaranth was a symbol of discipline and deepest sorrow as well as of deepest love. They had not been struck apparently as much by the mournful droop of the long flower heads as by their resemblance to a blood-stained scourge. In France I discovered the amaranth was the "discipline of the religious," the *cordelière* (Franciscan's girdle?), and in parts of Southern Europe, according to an authority on the subject, it was known by the name "scourge of our Blessed Lord." God's flower, flower gentle, floramor, love lies bleeding—all these names became very suggestive to me as I watched the dull red tassels day by day, and the "coarse annual" as my friends called it, continued to bloom undisturbed, and to cover more and more space with its strange foliage.

"Never enlivened with the liveliest ray
That fosters growth or checks or cheers decay,
Nor by the heaviest raindrops more deprest;
This flower that first appeared as summer's guest
Preserves her beauty mid autumnal leaves,
And to her mournful habits fondly cleaves."

* * * * * * *

Many years have passed since my summers were spent in the old Richmond garden, but it is very pleasant to linger once again in the little world of flowers encircled by its high vine-covered walls. The faint purple of the wistaria blossoms shines

out against the ancient time-stained brick work, and covers the little arbour with its pendant clusters of flowers. The fig trees spread grey arms and scabrous leaves wide, green and cool, whilst again the jessamine fills the air with its sweetness. Across the sunny lawn the great yew trees cast long shadows and the roses bloom as of old, and in the side beds appear the marigolds and lilies, scarlet flower heads of the lychnis, sweet-williams, carnations, marvels of Peru, but rather apart, by the side of the fragrant rosemary bushes, grows in lavish profusion the love lies bleeding—the mysterious and sorrowful amaranth.

CONSTANCE HOPE.

HALCYON DAYS.

WHAT happy hours I spend beside
The gently flowing stream,
Watching the waterfowl that hide
Among the reeds, the fish that glide
In silent sport, while far and wide
The dancing ripples gleam.

Blossoms are shaken from the trees,
Like dazzling flakes of snow,
Whirl'd by the gentle southern breeze
From regions far o'er summer seas;
All round I hear the hum of bees,
Monotonous and low.

And like a sudden flash of light
From gem of purest rays,
The kingfisher with rapid flight
Darts up the stream, gladdening my sight
With show of azure plumage bright,
That scarce a moment stays.

But from that momentary gleam
What pleasure I derive!
By that fair sight all others seem
More bright, and happiness supreme
Remains, as when from some sweet dream
Forgotten joys revive.

And through the dreary winter days,
That vision fair will come,
And cheer my heart with hope's bright rays,
Recalling summer's woodland ways,
Where thousand songsters trill their lays,
Hid in their leafy home.

MARY C. WALTON.

A WINTER CUCKOO.

A PARAGRAPH lately appeared in *The Times* with the above heading which has given rise to much interesting correspondence on the subject of cuckoos in general, and mine in particular, so that perhaps a fuller account of him may be interesting to bird lovers.

I took "Jim" from a hedge sparrow's nest close to the railway early last June, and hung him in a cage near his birthplace. His foster-parents were so assiduous in their attentions, that even when we removed the cage across the field to the tennis house they followed. Knowing of cases in which birds poison their young when unable to set them free, I took "Jim" into the house; but the side door being always open, those faithful little birds were actually brave enough to venture inside and continue to feed their voracious foster-child, so I had to harden my heart and shut them out. I had no difficulty in feeding "Jim," he was always more than ready for his food, and in spite of my jay and bullfinch showing him marked dislike, he was always trotting after them with an open mouth, but I could not induce them to pay attention to his wants. Even now, though he can feed himself (on the sly as it were), he expects to be fed, sitting on my finger; he always tells me when he has had enough by promptly turning his back on me and making for his cage.

Though only one note is distinctly recognized as belonging to the cuckoo (and which, it is believed, is not uttered in confinement), my bird has several—a particularly clear, melodious whistle, single notes, some like a quack and others reminding one of the squeak of a mechanical toy; but his *scolding* voice is most comical—a long chatter, with two very emphatic raised notes at the end—this when things do not go as he wishes.

When he gets what he wants (in the shape of a meal worm, which his soul loves, and for which he will follow me anywhere, the very sight of the tin making him wildly excited) he gives contented chuckles, and now I notice that as spring advances, his voice is getting clear and liquid.

Though "Jim" appears to feel the cold, I know of a cuckoo who thrived last winter when the cold was so intense that the drinking water froze in his cage! So we may conclude they are hardier birds (and I may add, far more interesting as pets, being very affectionate and easily tamed) than most bird books give them credit for.

Perhaps wintry weather makes moulting difficult, for my bird is getting his new coat very slowly; though quite half feathered, many invidious remarks are passed on his appearance—"just ready for the spit!" &c.—with an utter disregard to our feelings. His tail is our great trial, for though he does his best to grow one, he will sit down and so breaks the feathers before they have time to grow any length.

"Jim" is a bird of great observation, with a bright intelligent eye. It is a curious fact that he refuses to notice me when wearing a light coloured blouse—I cannot even coax him to take a meal worm! He retires grumbling to his cage, and stands making absurd curtsies, deep and swift, for all the world like a "jack in the box." He does not know what fear is, and has plenty of pluck; he is very quick of sight and hearing, distinguishing my step from others, and chirping; it is amusing to notice the lively interest he takes in all that goes on round him, often craning his long neck, the better to see. His health is now excellent, so that I have great hopes of his living to a green old age.

Shrewsbury. E. CORBET.

[As a pendant to Miss Corbet's interesting paper, we think it worth while to reprint an account which appeared in the *Quarterly Magazine of the High Wycombe Natural History Society* for April, 1868. This magazine had a very limited local circulation, and the account will be new to the readers of NATURE NOTES.—Ed. *N. N.*]

This bird was taken in a half-fledged state from the nest of a hedge-sparrow early in the month of June. The first food provided for him was a boiled egg, which pleased his juvenile palate—bruised seeds and soaked bread were also given to him. After a few days worms and raw meat were offered. These provisions were greedily swallowed, though for some time he declined the trouble of feeding himself. During the severe weather, when worms could not be procured, raw meat was preferred; but cooked meat, vegetables, bread and butter—indeed, almost anything—were devoured. On Christmas Day he dined off turkey and plum-pudding. Hot buttered crumpet was a favourite dish. The bird is extremely tame, the feature of fear towards any of the household seems quite unknown. As the door of his cage is frequently left open, the cat, attracted by the smell of meat, sometimes ventures to put her nose in, and is rebuked with a peck from his beak. Whenever a clatter of plates or knives and forks is heard in the kitchen, an answering note is heard from the cage, the cuckoo descends from his perch, and, should the door be closed, knocks his head against it until a friendly hand attends to his wishes. His eating is not confined to regular meal times, but he is stuffing all day long: probably the reason so few have lived is that they have never had enough given them to eat. The food is well shaken, passed several times through the bill, as if to soften it, then swallowed with a jerk of the head.

The struggle of instinct at the usual time of departure spoiled his beauty. At night he was constantly found with his wings spread, beating against the cage. Darkening the cage did not prevent it; the feathers of his long wings and tail were all broken. He had a cropped, queer appearance, and as the feathers show no sign of growth, he will present a sad contrast to the brothers and sisters who have spent their winter under brighter skies in more genial climates.

THE KINGFISHER-CATCHER.

IT is satisfactory to note that our literary journals give their influential support to the objects which the Selborne Society has made its own. Last month we quoted from the *Saturday Review* an energetic protest against the disfigurement of Kew Gardens by unnecessary tree-felling, and now the *National Observer* (of May 9) speaks earnestly upon the subject of the destruction of birds. There is so much of interest in the account that we venture to reproduce it in full for the benefit of our readers :—

Everybody who has lived in India and not kept his eyes in his pocket is familiar with the large blue kingfisher, or, as it is sometimes called, the white-breasted kingfisher. There are many kinds of kingfishers in that country, of many sizes, from the great, coarsely coloured and loud-voiced *Pelargopsis*, almost as big as a crow, to a little gem so slightly different from our own bright English kingfisher that ornithologists are almost agreed that it should be known by the same scientific name. But of them all there is not one that is more generally spread over all the country and catches the unobservant eye more easily than the white-breasted kingfisher. Birds have their characters, like men, and among them, as among us, "the apparel oft proclaims the man." A glance at this white breasted kingfisher is enough to show that it is not one of those quiet, unobtrusive personalities who pursue their way through the world without attracting attention. All kingfishers are beautiful, but this one is aggressively beautiful, gaudy and made up of contrasts which challenge the eye. When it sits on some out-reaching, withered branch, overhanging a pond or stream, and watches for fish turning, its long coral-red fish-spear this way and that way, its snow-white shirt-front, invading the rich chestnut brown of its underparts, refuses to let you pass without noting it ; and when it flies, then blue and black and red and white blaze out together, like a firework designed to dazzle and delight. Moreover, in obedience to a general law of nature which forbids gay colours and a musical voice to the same bird, it has a loud, hoarse rattling note, which it generally utters when on the wing, announcing its arrival or departure like the governor's guns. It is an indifferent fisher, and preys chiefly on creatures more easily caught than fishes, to wit, on tadpoles, frogs, lizards, large insects and the like, creatures which do not usually enjoy much of our sympathy. Yet the catching and killing of this poor bird constitutes one of the many curious occupations by which man makes his bread. In India, where a religion prevails according to which it is sinful to take any life, there are at this day men whose whole business it is to wander about the country snaring this particular species of kingfisher.

I once fell in with one of these wretches, and he freely showed me his methods. His apparatus was a very fine, almost invisible net, running by loose rings upon three thin, straight sticks, which were sharpened at the points, like cricket stumps. When he had noted the haunt of a kingfisher, all he had to do was to set the three sticks lightly in the ground, in the form of a triangle, with the net draped upon them, and tether a decoy bird to a peg in the middle, and retire. The kingfisher is a pugnacious fellow, and no sooner sees the intruder than it cries (I am quoting the bird-catcher), "Hullo ! What are you doing in my grounds?" and dashes at the intruder, plunging against the net, which it does not notice. Net and sticks come down together and envelop it, and the bird-catcher, coming out of his hiding-place, wrings its neck and cuts off its wings, which are all he wants.

The fellow took out one of his decoys to show me the way in which he wrung the neck and plucked off the wings. The poor bird resented the insult, fighting fiercely with its long red beak, and he restored it to the bag in which he kept it ; but I knew that its turn would soon come, for a kingfisher is a difficult bird to keep, and it saves trouble to use a fresh captive each day and wring the neck of the old one. The man had already collected a hundred wings and he

told me that he intended to work his way to Madras, where he would get a good price for his stock. He had no doubt that before he got there he would have wings enough to make this long journey on foot, across the whole breadth of India from the west coast where I met him, a profitable enterprise. How I burned to kick that fellow into some sense of his own shame, and to scatter his spoils and set his poor captives free. But the day has gone by when the Englishman might do such things in India. The people have learned to understand the impartiality of British law too well, and there is unhappily no law to protect my rights in a case like this. For I claim that I and every man with a heart and eyes have a right in all the beautiful wild things with which God has adorned this world for us. And since there is no law to maintain our rights and shield us from outrage, it was a righteous feeling that prompted me to take the law into my own hands and vindicate humanity. But prudence prevailed and I let the fellow go on his murderous way. There are many like him, how many I do not know, but I know that hundreds of bales of birds' wings appear among the exports in the returns of the Madras custom house every year, each bale a long record of atrocities which it makes one melancholy to think of.

I need scarcely say that the kingfisher-catcher is not a caste. His trade is no part of the Hindu system, but a product of western civilisation. He is a purveyor to the dames of Europe who like to be seen in public with a wing in their hats, and the blood of the birds he butchers is on their skirts. And they, gentle souls, are founding hospitals for homeless cats and offering crumbs to the robin at the window, or putting out food for the hungry sparrows, and it has never occurred to them that the pretty wings in their hats did not fall of themselves from the bright birds that once flew with them.

> "Sweethearted you, whose light blue eyes
> Are tender over drowning flies."

It is not difficult to picture the shudder with which you would turn from the kingfisher-catcher if you could see him at his trade. But he is in your pay. Every lady who wears a wing or a tail, or a whole humming-bird, in her hat, is subscribing to support that wretch and all of his kind just as directly as she is helping to send missionaries to the heathen when she buys something she does not want at a mission bazaar. That this thought should have so little influence is strange; but to me it seems still stranger that persons who show so much good taste in other matters should be blind to the execrably bad taste of all that kind of adornment. A bird's wing is no doubt a very beautiful thing, and the love of such beautiful things is natural and as old as man; older indeed, for as Mr. Herbert Spencer would say, it preceded human evolution; the bower-bird ornaments its bower with bright shells and pretty feathers. But man is higher than a bower-bird. He does not admire with his eyes only, but with his mind and heart. All things, beautiful or hideous, come to him in a framing of memories and associations, and he cannot unframe them. It is a pitiable sort of man of whom the poet can say—

> "A primrose by a river's brim
> A yellow primrose was to him,
> And it was nothing more."

Even the head-hunter of Borneo does not admire his necklace of human teeth only for its pearly lustre and beautiful regularity, but for the glory that flashes from it, the story which it tells of patient ambush, valiant onslaught, victory, and then the neck-severing slash and the gory head rolling on the ground. We have learned to think very differently about these things from the savage Dyak, and therefore the necklace of human teeth is as ugly to us as it is beautiful to him; but have we not yet something to learn if we can still take pleasure in decorating our persons with bits of the corpses of dead birds? It is true other creatures must die that we may live. We cannot feed ourselves without their flesh or clothe ourselves without their skins. But good taste prompts us to put out of sight, as far as possible, everything that would connect in our minds what we are eating or wearing with the life that was the price of it. And what we must see we submit to as a necessity, we do not feel pleasure in it. To decorate ourselves with the remains of the dead is another thing altogether. I do not speak of

ostrich feathers or the eagle's pinion in a Highlander's cap, which suggest nothing repulsive, though the ostrich or the eagle *may* have been shot. But a wing or a tail with the bones still in it and the dried flesh—the idea is loathsome.

MOORLAND IDYLLS.*

Mr. Grant Allen's title is extremely felicitous. Not only is the writer of idylls under no obligation to be instructive or erudite; he is bound to exhibit no such qualities. His business is not with the theme of his choice, which should be as void of solidity as possible, but with its garnishing; it is the supreme triumph of his art to be able, as was said of Dean Swift, to write beautifully about a broom-stick.

Of the liberty thus obtained to discard all pretence of having any story to tell, worth telling on its own account, he has availed himself to the full, and perhaps somewhat beyond. It seems a somewhat scanty foundation whereon to base even an idyll, that a town martin has a nest under the eaves of his hill-top cottage; or that there are rabbits in his garden; or that an old Scotch fir grows on the moor hard by. Yet, these statements sufficiently summarise as many chapters of his little book. His is doubtless a facile and practised pen, and he has a knack of putting colour into a word picture, which, at any rate at first, is very captivating; but his range is limited, and his method almost unvarying; and when, after having written so much, he eschews, as in the present instance, almost entirely the philosophizings which were wont to provide his essays with a skeleton, and which, however we might disagree with them, at least gave something seriously to examine, the result is of necessity somewhat unsatisfying.

Instead of a philosopher, Mr. Grant Allen now presents himself as an observer; instead of expounding the operations of nature in the dim ages of the past, he undertakes to tell us what actually goes on in the world of life to-day. The result is to emphasize a haunting perplexity of which we have ever been conscious in regard of his natural history. How is it that he sees things in nature so differently from the rest of the world? He tells us, for instance, that the catkins of the alder and the birch are "fluffy," which of all epithets would appear to be the least appropriate, though it is doubtless inevitably suggested by those of the willow. Again, he declares that an adder will kill more mice in a week than a man will catch in a summer. But when, recently, the plague of field-mice, or field-voles, was devastating a district of Southern Scotland, and there was question of protecting the natural enemies of such vermin, the very capable commissioners to whom the point was referred came to the conclusion that the good done by such reptiles was too insignificant to be counted in their favour; and with this verdict few will quarrel, who know how few and far between are the meals of venomous snakes, which Mr. Hudson well styles, "the champion fasters of the universe."

More extraordinary is the information supplied with regard to the missel thrush, which is of so remarkable a character that, do what we will, we cannot avoid a suspicion that Mr. Grant Allen has mixed up this bird and its cousin the fieldfare. The missel-thrush, he declares, is to be recognized by the white beneath its wings, which is a feature possessed equally by the others, and by its extreme wildness when feeding gregariously in our fields during the winter, a characteristic which marks the fieldfare far more strongly. Most puzzling of all, he tells us that the missel-thrushes go off to spend the summer on their moors in Norway, a fact which will be new to many, returning when the winter sets in. Fieldfares of course go to Norway, and beyond, to nest, whence they return with the first approach of winter, and each autumn some one writes to the country papers to announce their arrival, when, in fact, the birds seen have been missel-thrushes. The latter undoubtedly nest in this country, and to undertake a migration north-

* *Moorland Idylls*, by Grant Allen. Chatto & Windus, 8vo., pp. 247, 6s.

ward and across a broad sea for any other purpose would be a most singular proceeding, quite out of keeping with the ordinary rules of bird life.

Mr. Grant Allen is very emphatic concerning the connection between this bird and the mistletoe. "The truth is," he tells us, "the mistletoe and the missel-thrush are developed for one another," the bird propagating the plant and the plant feeding the bird. As a matter of fact, there is no stronger bond between them than a somewhat dubious matter of nomenclature. Missel-thrushes abound where no mistletoe grows, and were the latter dependent on the services of the former there would, we fear, be a dearth of it in our Christmas markets. More than this: if the fact be so, why does the missel-thrush go off each summer to "its Norwegian estate"? The mistletoe is surely not found in pine woods or on moors.

J. G.

NATURAL HISTORY NOTES AND QUERIES.

More about Rooks.—The Southampton rooks mentioned on page 98 are good, but our brand-new Folkestone rookery is better, and may almost be called a "record." Six or seven nests, with nestlings and all complete, have been set up on two or three trees of very meagre size, and in a very confined space between the backs of two rows of houses in one of the busiest parts of the town. Why the birds established themselves there it is difficult to see. There are much finer trees within a short distance, and old-established rookeries not far off. But rooks are so intelligent that possibly they have come there to escape the yearly massacre of their young. No gun can molest them where they are, and authority, in the person of the Town Clerk, protects them from its back windows.

A. L. Hussey.

Birds in Richmond Park.—On Sunday, April 19, I spent two hours in the morning in Richmond Park. Entering by the Ham Gate I strolled about a quarter of a mile into the park and laid down and basked and jotted down the birds which came under my notice. During those two hours my list amounted to no less than thirty species—none of them rare, but many interesting. I saw eight herons at the same time flying overhead, so that though there may be good foundation for the abuse which has been lavished upon the persons who are responsible for the felling of trees containing the herons' nests, there is no ground for the supposition that all the birds deserted the park at once and for good. The following is my list as it was taken down:—Starling, sparrow, rook, robin, blue tit, wood pigeon, thrush, hedge-sparrow, nuthatch, wren, chaffinch, blackbird, swallow, crow, partridge, chiff-chaff, tree pipit, willow wren, cuckoo, jackdaw, great tit, pheasant, heron, missel thrush, redstart, pied wagtail, linnet, green woodpecker, stock dove and cole tit. There is no reason to suppose the list would be any smaller on any bright spring morning.

A. Holte Macpherson.

Curious Nests Built by Magpies.—I can corroborate the story of the nest built by magpies of wire (see page 73) by an incident which occurred about four years ago in the grounds of a devoted friend of animals, who has, within a few weeks, gone to her rest—my friend Mrs. Walker, of Robin Hood, whom to know was to admire as a clever woman, and to love as one full of goodness. She had a pair of tame magpies who roamed at liberty and came at call. When the nesting season came they built a nest (I think they built two) of pieces of lead wire, short lengths which had been brought from Mr. Walker's works in town to tie on tree labels. The magpies had every kind of material suitable for their purpose of which their nests might have been constructed, but they deliberately selected and stole the lead wire only because it was something new and worth stealing, for they did not use the nests for any legitimate purpose.

Birmingham. Lawson Tait.

Summer Migrants.—It may be of interest to any readers who notice the arrivals of our summer migratory birds, to compare notes in different localities, as was the practice of Gilbert White a century or more ago. As my list is now nearly complete I beg to enclose it, and hope to see notes on the subject from other readers in various districts.

Chiff-chaff, March 19; wheatear, 21; redstart, April 7; blackcap, 10; cuckoo, 14; whinchat, 16; titlark, 16; nightingale, 16; willow wren, 19; grasshopper lark, 19; yellow wagtail, 20; swallow, 21; whitethroat, 22; sand martin, 26; garden warbler, 30; lesser whitethroat, 30; swifts, May 2; sedge warbler, 2; corn bunting, 2; black-headed reed bunting, 3; house martin, 6; corn crake, 7; butcher bird, 9; fly-catcher, 12; turtle dove, 13.

Astwood Bank, Worcestershire. J. HIAM.

Bees and Jackdaws.—I noticed a rather curious incident a few days ago, that of a jackdaw and a colony of bees occupying a hollow tree, apparently on the best of terms. An elm tree has been blown off about half its original height, and in a hollow cavity near the top a colony of bees are established; just above a pair of jackdaws have built apparently, as the bird flies off when I go to look after the bees. J. HIAM.

Sparrow-Hawks.—An amusing case of lack of knowledge on familiar objects was lately shown to me. A man who was gardening, asked if I had lost a fowl the previous night, as one, he related, had been killed by a fox since he passed the spot on his way home on the previous evening, as indicated by the large quantity of feathers strewn about. I went some distance to solve the problem, and found that, no doubt, a sparrow-hawk had killed and eaten a skylark. A few days before the hawk was found in the act of breakfasting on a cock partridge he had just killed, it being still quite warm and bleeding.

J. HIAM.

Glow-worm and Beetle.—Happening to look out of my study just now I saw a glow-worm under the hedge close by. I went down to inspect, and then with intent to secure a specimen for examination, struck a match to see how the land lay, so as to pick it up neatly. Directly the match flared, out rushed a beetle over twigs and leaves, and went straight for the little brown ragged worm that lay there and gripped it in the middle. The match burned out; I struck another, which seemed to frighten the beetle, for he scurried off as fast as he came. I got my worm into position ready for picking up; out went match no. two, and, alas, the light of the worm was dimmer. The third match was struck and off I marched, and by the time it had burnt out the light given by the worm was a mere pin's head in size. I brought it in and found that it was bitten in the middle and its inside had been a bit pulled out, and now it gave no light when the room was darkened. Can any information be given as to why the attack of the beetle should be made directly the first match was struck, the strong light of which completely surpassed the glow-worm's. Is the power of illumination given for any purpose of defence to the worm? The second match struck caused the beetle to quit his hold and fly for cover; there seemed no other cause of flight, for I remained neutral, interfering in no way save to strike matches, in the sharp short struggle. G. B. R.

A Rook Query.—A friend of mine one day noticed a rook perched on a tree near the house, with its beak full of what at first sight she thought was caterpillars, but which, on looking at the bird with an opera glass, she found to be little strips of bark. The bird flew away, but returned in a few minutes and began tearing up the bark off the branch on which it stood: when it had filled its beak it flew away again. Is it usual for rooks to do this? and were the strips of bark to put amongst the twigs of which the nest is built? I have often noticed the way in which a rook appears to balance himself after alighting on a tree, but perhaps this appearance of balancing is when he is tearing up the bark in the way my friend noticed. If anyone else has observed this trait in rooks I shall be much interested in hearing of it.

Hampstead. MARY GEDDES.

A Peculiar Hive.—Of all places in the world for a swarm of bees to set up housekeeping one would think the unlikeliest to be the roof of a house in a London suburban "long unlovely street." Yet that is just what a colony of these most interesting insects have just done, and but for an accident they might have stored their honey, and consumed it too, without anyone dreaming of their presence. The house is one of the usual jerry-built ones of seven rooms, with a back addition, and a fairly long garden. The wall of the back addition comes down sheer from the slated roof, but just beneath the slates some of the rubbishy mortar slapped in to supply the place of a brick or two has crumbled away, leaving a space which admits of sparrows and house martins entering among the rafters. Two days ago a neighbour's grey parrot escaped from its cage, and for a while evaded the pursuit of its anxious owner. At last it alighted near this opening at the top of the aforesaid wall, seeming somewhat weary. Its pursuer mounted by means of a ladder, and was about to seize it when he was horrified to find himself assailed by a cloud of irate bees. He beat a hasty retreat, followed by his parrot, who had also evidently found the situation unpleasant. He secured his bird and hastened home. Next day he discovered that his bird was ailing and carefully examined it. He found it to be badly stung about the breast, from which indeed most of the feathers were dropping out. Applications of soothing lotion soon relieved the poor bird, who is now doing well. My kitten, however, being town-bred, playfully chased and snapped at the big flies as he evidently thought them, and the result is that his taste for fly-catching is gone. The house in question is next door to mine, and within a stone's throw of East Dulwich Station.

F. T. B.

TO CORRESPONDENTS.

F. T. B.—Please read Rule 4. Your communication went to two addresses before reaching us.

G. C. B.—We are not anxious to encourage exchanges of the kind you mention.

S. B.—The great spotted woodpecker.

W. J.—It is impossible to determine critical plants from material so insufficient as that sent. (1) Is perhaps *Ranunculus floribundus*. (3) Is probably that form. (2) A large form of *R. hederaceus*. (4) *Luzula campestris*.

Chilworth.—*Kerria japonica*.

Al Fard.—(1) *Hypnum rutabulum*. (2) (Hepatic) *Jungermannia bidentata*. (3) *Hypnum squarrosum*.—(1) *Sphagnum cymbifolium*. (2) *S. acutifolium*. The *Lepidium* is *L. Draba*, which is naturalized in many parts of England. Is it established in the locality whence you write?

H. K.—*Kalreuteria paniculata*.

Sedges.—(1 and 3) *Carex glauca*. (2) *C. stricta*. (4) *C. sylvatica*. (5) *C. remota*. (6) *C. hirta*. Specimens too young for satisfactory determination.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

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ANNUAL MEETING AND CONVERSAZIONE OF THE SELBORNE SOCIETY.

IT is a matter for regret that the Annual Meeting cannot be held at a place equally convenient to every member, so that the gathering might be more representative than is possible under existing circumstances. But a Society with such wide-spreading branches must always suffer some disability from this very fact, though in the time to come, distant branches may arrange to send delegates, and thus help to make the Annual Meeting a real meeting of the whole Society.

However, the numbers attending the Annual Meeting and Conversazione on Thursday, May 7, 1896, were larger than on any previous occasion, and the Society's rooms could not well have held more. Unfortunately, Sir John Lubbock was prevented by indisposition from occupying the chair, but Sir William Flower, K.C.B., F.R.S., P.Z.S., on very short notice kindly consented to take his place, and gave a most interesting address.

In opening the meeting, Sir William Flower expressed his regret, and that of the members present, that they were not to have the pleasure of listening to an address from the President, particularly as they would not have any address from him (the Chairman) instead. He had great pleasure in moving the adoption of the Report, and as printed copies had been circulated, he would not be obliged to read it through to them, but it could be adopted and taken as read. That we all feel the need of a Society such as this, was evidenced by the fact of the large number present that evening. If you were not convinced that the Society is doing a good work, Sir William continued, you would not have come here, and the particulars of that work I need not tell you, as you know it already. It is a curious problem in human nature, that some people are born into the world with a love for and interest in the beautiful things of nature around them—a love of insects, a love of birds and plants. To many people the study of these things is a fascination, while other people have it not in the least. They go through the day without observing any of these things, and without deriving any pleasure or instruction from all the beautiful objects of nature around them. It is only a very small proportion of the population of the world that cares for these things, and yet that proportion seems to arise in all nations (at all events, in all civilised nations), and is observed in all periods of the world's

history, and is found quite apart from distinctions of either class or rank or other associations, for students of nature are found amongst men of the highest social rank and great wealth. I may mention one of the princes of the Imperial House of Austria, and a very recent King of Belgium; while the heir to one of our own richest houses—Rothschild's—is well known as a most devoted and enthusiastic student. Then on the other hand you will all remember Thomas Edward, the Scottish naturalist, who for the whole of his life was a working shoemaker, and yet was a most devoted student of nature. There are people in all ranks with this taste—with this desire—and all these people, I am sure, lead purer lives than those who have not it; for though they cannot cultivate it as a profession (for many cannot), it adds something of enjoyment to almost everything they do, almost every day they exist, which people who have not the taste never feel. Now the question arises, Is this peculiar condition of mind which enables one to enjoy nature and the beauties of nature around us in our own country, and in our own time, increasing, or is it not?

Facilities are very great, and organisations are being formed all over the country, in the way of societies such as this, and others with similar aims; but I confess that when I go round the country and talk to people and see what they are doing, I am sometimes disappointed to see that it advances so slowly and so little. A society is formed, some one or two enthusiastic persons keep it going for a time, and when they pass away the interest flags and very often drops out altogether. But what discourages one more than anything else is the condition of the museums of this country. I take a great interest in museums, as you are aware, and I make a point, wherever I travel, of going to see what is going on in the local museum. A museum is started or established in some country town, a building is appropriated, various things are brought together, and the people who have done this think they have done a great thing towards cultivating a love for natural history. But in twenty or thirty years when you go again to that place, you will see the building and most of the specimens, but in such a condition that you might well think that the inscription "Rubbish may be shot here" should be over the doorway. There are a few exceptions here and there, of course, but the principal reason is that when people start a museum they forget one thing. If you were starting a school the first thing you would think of would be the schoolmaster. A church is of no use without a minister; a garden is of no good without a gardener. None of these things are expected to take care of themselves, yet that is what *is* expected of nearly all the museums in the country. They are set up and the exhibits are arranged, but the last thing anybody seems to think anything about is the curator. A curator is the heart and soul of a museum, and yet we have museums going to decay because nobody thought

of the expense that is needful to keep a curator and his staff going. There is, I am thankful to see, a move in the right direction being made in some places. I was very glad to be present at the opening of a charming little museum in Epping Forest. It is intended solely to cultivate and teach an interest in the objects found in the immediate district. Yet here, again, although the museum has been founded, there seems to be no permanent endowment to secure a good curator. If the thousands, aye, tens of thousands, which have been spent on so-called technical education had only been spent in founding really good local museums—places where anyone wishing to know about any bird, or stone, or plant, might go and see for themselves—for I maintain that a museum in its proper sense should be a place of instruction, not merely showing things stuffed and dried like miserable mummies, but giving instruction as to its nature and habit, and any other we might wish to know—what an immense store of useful information would have been gained.

But I began by inquiring whether this taste was growing, and I am glad to see in the report that the Council is facilitating the establishment of Junior Branches. You cannot begin too young in fostering a taste for natural history; not only will the knowledge last longer, but it impresses itself so much more than in later time. I remember when I was a very small boy, only nine years old, that I had a very large collection for my age, and some of the things I had in my museum at that time, have been a source of great interest to me ever since. In particular, before I had got much of my collection together, I remember as a very little boy seeing a little bird—it was a wood-warbler—stuffed, on a little stand in a pawnbroker's shop in Stratford-on-Avon, my native place. I can recall exactly even now what it looked like. I fell in love with the little bird at once and inquired the price, which I was told was 3d. Not possessing that sum myself, I extracted it from some relatives, and became the possessor of the bird. In my absence at school it was not adequately cared for, and fell a prey, being placed where lumber is stored, to the moth and rust which doth corrupt. But ever since those days, when I have seen that bird, whether in the Highlands of Scotland or the woods of Germany, it always seems to me something different to all other birds. It was no doubt badly stuffed and wrongly placed, but for all that it taught me the name of one bird, and gave me a strong interest in all connected with it. I should consequently encourage the foundation of museums for children, with adequate collections in each department, though that would be treading on difficult ground owing to certain provisions of the "Wild Birds Protection Act." I suppose the instinct of killing, which is so prevalent, survives, because our ancestors for many generations depended upon their power to kill in order to live. If they could not go out into the fields and catch and kill some animal they would perish of hunger. That was the original

state for a very long time, and it no doubt developed that keen sense of pleasure in killing an animal which is only equalled by the one higher pleasure of killing a man. People will go through any amount of suffering—as they do in war—to kill or to be killed, and I do not think there is anything in this world that men have sacrificed so much for as for the sake of fighting; nothing is so popular as war, even among our most civilised nations. Women never have this instinct—never naturally; of course there are occasionally women who enjoy salmon fishing, &c., just as there are some men who do not, but they are the exceptions. A boy will always, if he sees a fly in a window, try to catch and kill it, or if a mouse runs out of his hole every boy starts off to catch and kill it, while every girl tries to climb on a form out of the way. Well, we must bear this in mind, that it is a perfectly natural instinct for a boy to throw a stone at a bird, but it is an instinct he must be taught to control. We all read of the sad end of that poor porpoise who came up the Thames about a month ago—how everybody struck at it and threw things at it, and shot and harpooned it—it was the impulse of everybody to try to kill it. This impulse, though it be not a wicked one at first, is one which a boy should be taught is wrong, and should be replaced by an interest in and regard for all animals and living things. Herein lies the value of the Selborne Society and other kindred societies. With regard to sport, I cannot say that I entirely disagree with sport, even when men do go out to kill birds or animals. Sport tends to induce patience and fortitude, and takes people out of the town into the country, and helps them to enjoy the beauties of nature. It needs early rising and many other things, and you must consider whether these and other advantages are sufficiently great to counteract the evil to the animal, which must not merely be computed by the numbers killed, as the greater number would soon die in other ways, for we must remember that all wild animals prey upon each other. There are, however, other practices which go by the name of sport which are hardly worth considering as sport at all; some so-called sports which are altogether abominable, and where the destruction of life can have no possible compensation in any good to the men who practise them. Then there are questions involved, difficult questions in relation to legislation. I am rather sorry to see that more legislation is required for the protection of wild birds. I fear we may have too much legislation about many subjects, and you need to remember that you cannot make men good and moral by legislation, and we must be very careful in exercising these laws to see that we do not go too far and make legislation ridiculous. For instance, to prohibit the taking of ospreys' eggs in the *County of London* is, I think, going a little too far.

I would rather see people humane to animals from their own knowledge of them than compelled to be so by law. Of course there are cases where law must come in, but if we can, by

public opinion, by the work of the Selborne Society, spread a knowledge and love of animals for their own sake, we should have no need for these laws.

The Chairman then formally moved the adoption of the Report.

Dr. Dudley Buxton, in seconding the adoption of the Report, expressed his gratification at the work the Society was doing, and that the interest in the Society had been so well kept up during the past year. Particularly he approved of the extension of the Junior Branches, so that young people might learn to find in every hedgerow a practical lesson in botany, in every running stream a practical lesson in geology, and to see in the birds that fly about them and the flowers beneath their feet, the poetry of nature, a poetry which is even finer than the poetry of man; so they never need grow dull, but having learned the lesson themselves can go on and teach each man, woman and child, that there are things higher and better than money-grubbing, something that would take them out of themselves and make them feel that life was worth living. This duty, of course, applied first at home. The members of the Selborne Society who had themselves learnt the lesson would impress it upon their children, so that they would find in nature beauty—something to think about, something to look forward to. There were, of course, different ways of attaining our object, and one of the most important means was through the medium of the magazine. NATURE NOTES was really, in his opinion, the spinal cord of the Society, and the Society owed much to its Editor. No man probably had more to put up with—if he were not a bookseller—than an editor, and though they were all pleased to see Mr. Britten there without any signs of maltreatment upon him, yet doubtless he had suffered many bad quarters of an hour, and they all recognised the very great debt they owed to him.

The Earl of Stamford, in rising to support the adoption of the Report, stated that having had the honour of bringing a Bill into the House of Lords some time ago relating to the protection of wild birds, he knew something of the legislation on the subject, and if that should become law he did not think it would interfere with the principles stated by the Chairman. It was not intended to prevent the making of collections for museums or by *bonâ fide* students, but it was aimed at the professional bird-catcher—generally a very objectionable character about our towns, and one whose calling involved a very large amount of needless cruelty over and above the extensive natural destruction of bird life. And it had been felt that the practices of these men had become an evil calling for legislation. The Bill had, therefore, been introduced as embodying the views of the various County Councils round London. He also had much pleasure that evening in presenting to the Society, on behalf of Mr. R. Holt White, a manuscript sermon of Gilbert White's containing endorsements of the various occasions on which it had been preached at Selborne and elsewhere.

Mr. T. F. Wakefield moved the election *en bloc* of the officers and Council for the ensuing year.

Mrs. Brightwen, in rising to second the re-election of the officers and Council, said she was always glad to remember that she was living in the beautiful world of nature, and she would confine her remarks to the practical suggestion that it was possible to lead those to it who had not originally the taste for nature. She believed she was born with an intense love of nature. It may have been something in the air, as she was a native of the same place as the naturalist, Thomas Edward, alluded to by the chairman. She would not go into the vexed question of killing, but she had no doubt that learning more about how various creatures lived was the first step towards loving them, and with regard to that instinct in boys to throw stones at living things, she was sure that when they knew more of their lives they would have less desire to destroy. She had a little robin at home, he was constantly at her right hand; she knew where the nest was; it had brought in its little mate to see her, and if she gave him a worm he would feed his mate with it, and it was perfectly delightful to observe all the little incidents of the life of this little fellow.

It was needful to cultivate a love for plants and flowers while young, and the first thing was to teach children to observe the things of interest, even in the commonest plants, say, for instance, the dandelion. First in the spring the bright green leaf and its shape, so suggestive of its name, *dent-de-lion*, with its tooth-like notches, then the rising up of the flower-stem straight from the root and the unfolding of the bright yellow mass of bloom, and how, when fertilised by the bees the stem droops, to rise again a little later with the round ball of fluffy seed on the top to be blown out by the summer breeze and carried away. This may be made very interesting while you are walking with young people, but yet more is needed. You need to make them retain what they learn, and a good plan to attain this is to carry a natural history note book, and to get them to gather a few specimens as they walk, and to write down any particulars, and to make a drawing of them afterwards; of course very crude at first, but they will improve as they learn to notice more accurately the various details. A most delightful book could be made in this way by gathering specimen leaves of the various English forest trees, the leaves pressed out on the page and notes made of the character of the bark, the method of seeding, the uses the timber is applied to, &c., and only consider the many delightful walks it would take to complete such a book as that from day to day, and how it would set their (the children's) busy eyes to work to notice and find out fresh trees from time to time. From trees the study could easily pass to ferns and other things, and so would be created a taste for the beautiful in nature and a desire on the part of each to have the most perfect and complete collection. The drawing of the specimens may be

thought to be a difficulty; some may have no taste for drawing, yet it is wonderful what can be done by those who try, and if you can but get them to look carefully at any object before they try they will find it not so very difficult after all.

Mrs. Brightwen remarked upon the unusual tameness at her home of many otherwise wild things. Eight or ten squirrels came regularly for their breakfast of nuts; birds built in the garden shrubs, and even young foxes came to gambol on the lawn. She concluded her remarks by a confident expression of opinion that, did the young people but know more about the lives and habits of the birds and wild creatures about them, they would soon cease to be hard-hearted towards any dumb creature, and would not take delight in killing and maiming either bird or insect.

A vote of thanks to Sir William Flower for presiding, and for delivering so interesting an address, and also to the exhibitors and others for contributing towards the pleasure of the evening, was proposed by Mr. E. A. Martin, F.G.S., and seconded by Mr. William White, and was carried with acclamation.

Around the large hall were arranged a charming series of British wild flowers, painted by Mrs. G. E. Marindin, and some beautiful water-colours—also of flowers—by Miss Marie Low. Mrs. Brightwen—whose address, with other interesting speeches, is reported above—brought, amongst other things, a remarkably fine drawing of the nest of a nuthatch, also some natural history notebooks, kindly lent by Miss Charlotte Mason, founder of the House of Education at Ambleside—to whose admirable system of nature teaching Mrs. Brightwen wished to draw special attention. The living larvæ of British dragon flies, sent by Mr. R. Marshman Wattson, were most interesting, as also was the collection of seaweeds exhibited by Miss F. M. Pilkington, the delicacy of form and colour of some specimens being very beautiful. Mr. E. A. Martin exhibited a small but very instructive series of fossils, and there were various other interesting exhibits illustrative of other branches of natural history.

Upstairs several members of the Quekett and Royal Microscopical Societies kindly placed their microscopes at the service of the visitors, and exhibited a series of objects of pond life, the wonders of which are invisible to the naked eye.

Mr. Ravenshaw had charge of the oxy-hydrogen lantern, and showed some very pretty views of the village of Selborne, lent by Mr. Appleby of the Bath branch. These were followed by a most remarkable series of photographs of bird life, taken by Mr. Read of the Ealing branch, and Mr. Lodge of Enfield, both of whom described not only the subject, but also the means they adopted to procure the picture.

In the large hall a selection of music was given after the meeting. Mr. Herbert Grover, of the Carl Rosa Opera Company,

though suffering from a cold, sang two songs very sweetly, and the Empress Mandoline Quartette played several excellent selections on that pretty instrument.

The thanks of the Society are due to the ladies and gentlemen who assisted in various ways towards making the evening a great success in every respect.

REPORT.

THE Council of the Selborne Society has pleasure in presenting to the members its Report for the year 1895.

There has been a very satisfactory increase in the strength of the Society, both in point of numbers and influence, during the year. A new branch has been formed for the district of Abinger and Shere, near Dorking. Miss Forster, of West Hackhurst, Abinger, has kindly consented to act as the Honorary Secretary.

At the special general meeting held on November 5 at the Society's rooms, the following rule was adopted in order to facilitate the formation of junior branches at schools :—

That a junior branch may be formed, at a school or elsewhere, of persons under age, upon the written application of an adult, who shall be held responsible for the conduct of such branch, shall be a full member of the Society, and shall represent the branch upon the Council.

That junior branches be subject to the general rules of the Society, with the following exceptions :—(*a*) That the subscriptions of members of junior branches be fixed by their respective Committees, but only such members as subscribe 5s. per annum and upwards shall be full members of the Selborne Society. (*b*) That no payment be due from junior branches to the General Fund except an annual subscription of not less than 5s. (*c*) That each junior branch be entitled to receive the magazine. (*d*) That the members of junior branches be styled Associates of the Selborne Society. The Council hopes by this means to encourage the formation of branches consisting of juveniles, and thus promote the study of natural history on the lines of the Society, and it would appeal to the principals of colleges and schools throughout the country either to assist in their formation or to allow existing junior natural history societies to become in this way associated with the work of the Selborne Society. A junior branch has been formed at Dover College in accordance with the new rule. Mr. Bernard F. Hall has kindly undertaken the post of Honorary Secretary and Treasurer of the Branch.

A warrant has also been granted authorising the re-establishment of the Ealing section of the Lower Thames Valley Branch. The petition was signed by thirty-three members of the original branch. Mr. H. W. Ravenshaw, of 32, Albany Road, Ealing Dene, W., has kindly consented to act as the Honorary Secretary and Treasurer.

Many parts of the country being still without the organisations necessary for the due carrying forward of the work of the Society, the Council will be glad to hear from any member who is willing to undertake the formation of a new branch.

The Council has to record the great loss the Society has sustained by the death of the Bishop of Chichester, who was an active member for many years.

The Council wishes again to impress upon each member of the Selborne Society the importance of making an effort to extend its scope and work. The good that has been done should be an encouragement to increase our efforts rather than an excuse for relaxing them. Many flowers and birds, once plentiful, are becoming scarcer every year ; some of the most beautiful spots in our lands have been attacked by that vandalism which feeds on selfishness ; whilst millions of birds, both common and rare, are killed annually for millinery decorations.

It is the province of the Selborne Society to endeavour to abolish these evils, and whilst any remain it has work to do. But its efforts in this direction must be practically futile if it is left to the few to make them. There should be no lukewarm members of our Selborne Society. Its objects are such that none can plead inability to assist. All cannot, of course, have equal opportunities, but all can foster and endeavour to spread the same keen sympathy with the beauties of nature and the life around us, and make known the existence and objects of our Society. The importance of adding to the number of members should not be overlooked, and if each member would obtain at least one recruit at the commencement of our new year, the actual doubling of our members would be only one of the benefits that would arise. The hands of the Council would be strengthened ; the finances would be placed in a condition to enable the Society to take action where now it is compelled to remain inactive. Each new member becomes a centre from which may spring incalculable good to the objects we have at heart.

The evils we are combating are so great and widely spread that they can only be lessened by determined and continuous efforts, and the Council appeals both to branches and individual members to work with increased energy during the coming year.

The donations received towards the "Magazine and Leaflet Fund" have enabled the Council to reprint and issue various leaflets dealing with the several objects of the Society. Members are urged to distribute copies of the leaflets and prospectuses, as well as of *Nature Notes*, with a view of obtaining new members and extending the knowledge of the objects and aims of the Society. Application should be made to the Secretary, 20, Hanover Square, for leaflets and prospectuses showing the objects of the Society, details as to membership and the methods by which those objects can be attained, together with a list of officers,

branches, and names and addresses of the local Honorary Secretaries. The publishers are willing to supply back numbers of the Society's magazine gratis for distribution at local meetings, or to serve as specimen copies.

The Council again tenders its cordial thanks to Mr. James Britten, F.L.S., for the ability with which he has edited the Society's magazine, *Nature Notes*. The favourable notices and frequent extracts which are given in the press (the source of which is still, at times, not acknowledged) testify to the increasing value and interest of the magazine. The Council wishes also to thank the large number of members who have voluntarily contributed articles and notes.

A suggestion has been made that it would further the interests of the Society if articles in the magazine were reprinted in parish magazines and the like; and the Council will be glad to hear from any member willing to obtain in this way a greater publicity for useful articles.

The last page of the magazine, which from January, 1894, has been set apart for official notices and for news from the branches, is acknowledged to be a popular and interesting feature of the magazine. At the same time the Council would invite the Branch Secretaries to make greater use of it and to forward notices of any local work likely to be of general interest.

It is regretted that the time has not yet come when the Council can fulfil its promise to enlarge the magazine, but when that time does arrive, it is evident that some considerable portion of the space will have to be devoted to thus recording the work of the central organisation, of the branches, and of the Society generally.

The Society's Field Club organised last season a series of twenty-three rambles, which were a source of much pleasure and instruction to the members who took part in them. The number of people attending them has varied greatly, partly owing to the weather, partly to the locality. The meetings at Theydon Bois, Waltham Cross and Winchmore Hill attracted the greatest number of members. The area visited has been on an average within sixteen miles round London, but the distances were very variable, Ware, Virginia Water, Effingham and Boxhill being the most distant from, and Richmond and Tottenham the nearest to, London.

On June 15 Waltham Abbey was explored, and a most interesting historical and literary account of the Abbey and neighbourhood read. Whitchurch and Edgware, where Handel lived, were visited on May 25. Some fine frescoes on the wall of Chaldon Church were inspected on July 13. At this ramble Professor Boulger, who kindly guided the party from Merstham to Coulsdon, gave a paper on "Herb Paris." In one of the rambles Whitton Park was visited, and the fine exotic trees and shrubs that were planted there upwards of one hundred years ago were inspected.

It is hoped that the Field Club of the Selborne Society has been able to contribute a little to a wider knowledge, at any rate, of some branches of Natural History. Arrangements are being made to continue these

rambles this year, due notice of which will be given on the last page of the magazine.

The Council is pleased to state that further donations of books have been received from members, and from the editor of the magazine, for the Central Library which is in process of formation. Mrs. Percy Myles has very kindly consented to accept the office of Honorary Librarian. Gifts of suitable books or donations towards the purchase of books will be gladly received.

The Council has also in consideration the collection of lantern slides suitable for the illustration of lectures on natural history subjects for the use of the members, and would be glad to hear from any member who would be willing either to lend or present such slides to the Society.

A number of very successful lectures have been given on behalf of the Society during the year. The Council is greatly indebted to those gentlemen who have so willingly given their valuable services, and as the number of lecturers at present available is insufficient to meet all the applications received, the names of any members willing to speak and lecture, especially out of London, will be gratefully received.

Many County Councils have taken advantage of the opportunity afforded to them of enforcing the Wild Birds' Protection Acts, by obtaining orders to allow the Acts to become operative within their jurisdiction. The enforcement of the penalty is left to the local authorities, or to private persons, and members are requested to strive to see that the orders obtained are duly administered.

There is considerable scope for activity in the direction of the protecting of wild birds, and if in any county no steps have been taken under the Acts, the authorities should be stirred up at once to a sense of their duty. It is most important that where an order has once been obtained it should be steadily enforced. The comparative failure of the Wild Birds' Protection Act of 1880 was due to so few persons thinking it their business to get the infringements of the Act punished.

In Suffolk an influential body has been formed for the purpose of seeing that the Protection Order, which has recently been granted, is enforced. It is hoped that whenever an order is obtained a similar body will be organised.

Through the medium of the Society's magazine an appeal has been made to the clergy and ministers of all denominations, to use their influenc against the fashion of bird and feather trimmings. It was hoped that the destruction of birds for adornment had almost ceased, but such will appear to be far from the case. The Council urges members to use their best endeavours to discourage the detestable practice by every means in their power.

For a complete summary of the principles of law which now govern the preservation of foot-paths, roadside wastes, commons and village greens, members are referred to Sir Robert Hunter's *Footpaths and Commons, and Parish and District Councils*, published by Messrs. Cassell & Co. Sir Robert Hunter is a Vice-president of the Society, and an active member. District Councils, urban and rural, have now the power to purchase common rights, and once obtained, these rights may be

defended and enclosures prevented. The regulation of commons is now mainly in the hands of the London County Council, as far as Metropolitan Commons within the County of London are concerned, and those outside London and in the provinces are now to be controlled, subject to certain conditions, by Urban and District Councils. For further particulars members are referred to the able articles on the subject by Mr. Archibald Clarke in *Nature Notes*.

And in conclusion the Council wishes to reiterate the appeals made by the Editor of the Magazine to be moderate in the toll they take of the plants with which they meet in their rambles.

The Financial Statement for 1895 is herewith presented to the Society. It appears at the end of this Report.

WORK OF THE BRANCHES.

The Council has much pleasure in embodying in its Annual Report the following accounts of the meetings and work of branches. The Council wishes again to thank the honorary secretaries of all the branches for their labours on behalf of the Society, and such branches as are not mentioned here are omitted only because their work has not been specially brought to the notice of the Council, either by means of a report or through the Magazine.

ABINGER AND SHERE.—A Committee meeting of this branch was held at West Hackhurst, Abinger, in January. The Secretary read a letter from Mr. A. P. Wire, kindly offering to lecture here, and giving a choice of topics. The Committee resolved gratefully to accept Mr. Wire's proposal, and selected a lecture on "Sagacity in Animals" as the most suitable to a rural audience. The Secretary was instructed to write to Mr. Wire to this effect, and to propose February 12 for the lecture, as on that occasion the Rev. C. E. Matthews from Peaslake could be present, and wou d kindly work the magic lantern for Mr. Wire.

It was decided to supply the Band of Mercy paper to such schools as started Bands of Mercy within the radius of the Branch, in some proportion to the number of members who joined. These papers are to be used for a reading lesson in school and then distributed, so that each family joining the Band may possess one. The Secretary has found these papers exceedingly popular in Abinger, where a Band of Mercy has existed several years, and in some instances parents propose to bind them "because the reading is so pretty."

The Secretary mentioned to the Committee the complaints that had been brought to him by friends living at Holmbury St. Mary's of the number of dead squirrels found in the pasture woods, evidently stoned to death. This is a particularly cruel form of sport, as these graceful little creatures are found with every bone in their bodies broken. The same thing occurs in the woods round Peaslake, but the Rev. C. E. Matthews is taking steps to put a stop to it, which, if successful, will be a precedent for others to follow.

BARMOUTH.—The Barmouth Branch is bestirring itself to protect the beautiful scenery of the district from degradation and defacement. In a paper read before a meeting of the branch, it was suggested that an appeal should be made to visitors to refrain from exterminating flowers and ferns, and from destroying the beauty of various spots with picnic fragments. The Committee have carried out the suggestion, and cards have been printed and distributed to all the lodging-houses and hotels in the district. A joint committee of members of the District Council and Selbornians are now inquiring into the question of public footpaths on the hills.

Early last year the branch had the pleasure of hearing a paper read by Miss Hearn (Marianne Farningham), on the "Helpfulness of Nature."

BATH.—The Council has received notification of the resignation of the honorary secretary, Dr. George Norman, who will, however, still retain the treasurership of the branch. Mrs. Wheatcroft, of 27, River Street, has kindly accepted the post in his stead. The opening Conversazione took place on November 2, when the Rev. H. H. Winwood read a most interesting paper entitled "A Geological Ramble," in which he dealt with the local gravel deposits, and advanced interesting theories accounting for them. The lecture was illustrated by the limelight, under the able manipulation of Mr. E. J. Appleby.

At the Royal Literary Institution on Thursday, February 27, the members of the Bath Branch met to discuss the question of the preservation of wild birds and flowers. Mr. H. D. Skrine, President, was in the chair, and there was a large attendance of members.

Mrs. Wheatcroft opened the discussion by reading a paper in which she said that there were now over 200 members in the branch, who were all interested in promoting the objects of the Society. Six spring rambles were being instituted to take place on the first and third Saturdays of March, April and May, under the guidance of Selborne members who are botanists and ornithologists. If young children could be interested in the habits of birds and plants they would be less likely to evolve into the destructive British tourist. For this purpose the younger members of a family should join the Society as associates, or else form some junior branch, such as those now being formed by the Parent Society in schools, rules for which may be seen in the December number of *Nature Notes*, page 244.

The President said that birds of prey should for a time be left alone, as they were fast dying out, especially ravens, crows, owls and hawks. There were some small birds which had been destroyed in the interests of the farmer and gardener, which were not so bad as they had been represented. The sparrows were injurious and destructive, but their ruthless extermination would probably leave a gap in the feathered friends of man. They ate something besides grain, such as flies, and were particularly fond of blight and grub under the leaves of plants. He thought it would be important to publish a notice of the law and its penalties, to support the Act in this neighbourhood, to check the methodless destruction among young people, and the predatory habits of collec-

tors of eggs and specimens of birds, and to create a healthy public opinion in favour of natural history in schools and elsewhere. The way to instruct children in natural history was to make them love animals and flowers, and take an interest in them, but not to collect eggs and birds and take flowers.

Colonel Bingham Wright suggested that a great many birds should be added to the schedule, and, though he was a sportsman, he would like to see birds of prey included. He would sooner they lost a few partridges or pheasants than that birds of prey should become extinct. He, however, thought sparrows should not be on the list.

Mrs. Ashworth Hallett thought the owl was increasing in number, which was rather curious, seeing that it was not protected. She had never heard so many owls before as during the last year.

Mr. George Norman read the list of birds protected under the Act, and added that the County Councils had power to add to this list. He showed how this had been done in Somerset, Devon and Cornwall.

Colonel Bingham Wright suggested that a list of protected birds should be given to every gamekeeper with their license.

The President proposed, Mr. Norman seconded, and it was agreed, that the Committee be requested to draw up a list of birds which they thought should be added to the schedule.

BIRMINGHAM.—The annual meeting of the Birmingham Branch was held at the Council House, the Mayor (Councillor James Smith) presiding. There were also present Alderman Johnson, Councillor Martineau, Professors Hillhouse and Windle, Messrs. A. W. Wills and Oliver, Mrs. C. Dixon (treasurer), Miss D. C. Sturge (hon. secretary), and a number of ladies. In their annual report the Committee stated that there had been a slight increase of members, but as there had been several resignations the net gain was only five. They felt that much might be done to forward the principles of the Society by lectures to children in the towns, with the object of teaching them not to destroy plants, flowers, and bird life when they visited the country, and as a means of enlisting the sympathies of the children in the aims of the Society, they decided to offer prizes in the various schools for the best essays on Selbornian subjects. Essays were received from Bloomsbury Board Schools, St. Thomas's School, King's Norton and Bewdley, and at the end of February more were promised. The subjects chosen by the children were mostly connected with bird life. It did not seem at all easy to make the general public understand that everyone had a certain amount of responsibility with regard to taking care of plants and animals, whether they belonged to themselves or to other people.

The balance sheet showed receipts amounting to £49 10s. 1d., and an expenditure of £31 14s. 11d.

The Mayor, in moving the adoption of the Report, said they all appreciated anything which tended to increase their love of nature and their better knowledge of animals and birds. The Selborne Society, by promoting those objects, deserved their heartiest support. He was sure the lectures given at the Board Schools were most valuable.

They could not begin too early to teach children those subjects. What could the children in the midst of a town like Birmingham know of birds? The only birds they saw were sparrows, and Swallow Street was all they knew about swallows, and a visit to the Market Hall was their only chance of knowing anything about numbers of animals. Ignorance was a great source of mischief, and the great love of animals and nature required cultivating and teaching in the same way as any other subject. If the Society only enforced the avoidance of wanton destruction of life and the habit of preserving a thing of beauty as much as possible as it was found, it would serve a most useful purpose. It was not a sentimental, but a practical matter, and he considered that the Corporation of Birmingham had done all they could to help the Society by maintaining in such efficient order the beautiful Cannon Hill Park and by taking over the Lickey Hills. Concerning their own work, he dared say the Committee often felt disheartened at the lack of public interest in it; but the influence they exerted was very great, and they could not tell to what extent it would shape public opinion in the future.

Councillor Martineau had a suggestion to make for the enlargement of the sphere of the Society. A short time ago there was in the Town Hall a distribution of prizes to the Board School children under a scheme which had been in operation for about twenty years, and so admirably managed by Miss Julia Goddard. The scheme of which she was the originator was for the encouraging of the teaching of kindness to animals, and lessons on the subject had been given in the Board Schools, with the consent of the Board and with the hearty co-operation of the teachers. His suggestion was that the Committee of the Selborne Society should take up the work where Miss Goddard had been obliged to lay it down, and so prevent from dropping a work which he was sure must have been of great value indeed to the children and to the community at large.

Alderman Johnson said that no more civilising influence could be brought to bear on the mass of the people than the work which the Society at present undertook. He emphasised the suggestion which Councillor Martineau had made. The excellent work which Miss Goddard had done lay in the path of that Society, and he hoped that the Committee would take the matter into their consideration.

The following officers were appointed:—President, the Mayor; Vice-presidents, Mr. Priestley Smith and Mr. A. W. Wills; hon. treasurer, Mrs. C. Dixon; and hon. secretary, Miss D. C. Sturge.

CLAPTON (LOWER LEA VALLEY) (Seventh Annual Report, 1895).—The branch now numbers 66 members, being still a slight increase on previous years, notwithstanding losses from removal and other causes.

The Society's leaflets have been widely circulated in the district, but without any apparent diminution in the number of "ospreys" worn.

The field meetings were again a great success, but together with those of other London branches will in future be conducted under the management of the Central Committee.

Winter social evenings, at which papers were read on subjects in natural science, interspersed with music, proved very attractive.

It has been decided to keep a record of "first appearances" within a prescribed area around the district, and Mr. Ernest A. Nash has been entrusted with the registration of the same.

Mr. F. Primrose Stevenson has very kindly offered a prize for which it has been proposed to compete by an essay on the work of Gilbert White.

There is a small balance in hand after paying the annual tithe to the hon. treasurer.

CROYDON AND NORWOOD.—This branch reports a steadily increasing membership.

The work of the year has been principally of an educational tendency. A series of varied lectures have been delivered under the auspices of the Society at meetings of local societies and institutes. Lectures have been delivered by Mr. F. W. Ashley, F.Z.S., at Swansea Hall, on January 16, and Moffat Road Schoolroom on March 19, on "Birds and Snakes—are they related?" and "Our Fields and Woodlands."

An interesting drawing-room meeting was held on March 5 at The Cedars, by kind permission of Mrs. Perry, when Mr. Perry exhibited his collection of natural history objects.

The hon. secretary of the branch, Mr. E. A. Martin, F.G.S., lectured on November 12 on "A Chat about Coal," at West Croydon Hall, and on April 11 on "Great Britain under an Ice-cap" at the Thornton Heath Polytechnic; also to the children of the West Croydon Band of Hope on "English Snakes," on February 17.

The Committee would wish that every member of the branch would become an active worker in some field or other connected with the Society's objects.

Projects are on foot for obtaining an order under the Wild Birds' Act of 1894, but the Borough County Council are hesitating in the matter, and valuable time is being lost.

On February 20 a large and interesting assemblage of natural objects was brought together in Thornton Heath. The occasion was a united meeting of the Local Social Guild and the Selborne Society of Croydon and Norwood. The evening had been aptly termed a "Museum Evening," and it is much to be regretted that such a collection could not remain permanently on view.

The Rev. F. E. J. Bird, President of the Guild and a Vice-president of the local Selborne Society, opened the evening in a short speech of welcome to those present, and expressed his thanks to those who had contributed to the furnishing of the hall on the occasion.

Mr. E. A. Martin, F.G.S., local hon. secretary of the Selborne Society, then described in some detail many of the exhibits.

Mr. Alfred Wright, of Thornton Road, had been good enough to send a number of cases of birds, which were particularly interesting on account of their having been obtained in the neighbourhood.

Mr. Ward Adeney exhibited a number of eggs which had for the most part been collected in the fields around.

Mr. Gude, the conchologist, had brought swan-mussels, British pearl-mussels, a case of preserved blossom of the Malayan pitcher plant (*nepenthe*), together with some newly cut specimens of the same.

Mr. Perks brought living water snails, with pictorial representations of them, also a specimen of the uncommon fresh water limpet.

Cases of remarkably fine corals were shown by Mr. Perry, and large drawers of fossils from the chalk, gault clay, eocene formations, and carboniferous beds were ranged down the centre tables.

Mr. Rawlings, of South Norwood, exhibited Silurian fossils and belemnites from the lias clay.

Antiquities dug up from City excavations came from Mr. Perry, a crochet hook being specially noticeable, bearing the inscription, "Keep your temper."

Mr. Long exhibited a "Breeches Bible," also an antique prayer book, which had been presented to him by the late Mr. George Bentley, the publisher. Mr. Long also exhibited a large case containing two fine cormorants, and kindly provided ferns for table decorations. The walls of the hall were covered with reproductions of valuable manuscripts in the British Museum, and a large number of pressed orchids and other wild flowers, provided by the hon. secretary, who also showed original manuscript letters from the Right Hon. W. E. Gladstone, his son, Right Hon. Herbert Gladstone, Professor Huxley, Professor Bryce, G. R. Sims, William Black, the late Lord Selborne, G. A. Sala, Mrs. Fawcett, Sir Francis Knollys and others. A large centre table was occupied with specimens kindly lent by Mr. Downing, the Croydon delegate to the central Society. These comprised shells, corals, Egyptian insects, a squirrel from the New Forest, sections of various kinds of timber, and numerous miscellaneous specimens. The evening proved a thoroughly enjoyable one.

For each of the summer months of 1896, a Saturday afternoon ramble has been arranged in the locality, and it is anticipated that numerous friends will join with the societies in these rambles.

The Committee acknowledge with gratitude the many kindly references to the work of the branch, which have appeared in the Croydon and Norwood press.

SELBORNE SOCIETY.

Dr. ACCOUNT OF RECEIPTS AND EXPENDITURE FOR THE YEAR 1895. Cr.

	£	s.	d.
To Subscriptions	158	19	3
,, Donations	7	0	6
,, Magazines sold to Branches, and Arrears	161	15	9
,, Contributions by Branches	31	7	6
,, Donations to Leaflet Fund	2	15	6
,, Leaflets sold	1	19	0
,, Balance due to Treasurer...	54	0	6
	£417	18	0

	£	s.	d.
By Balance due to Treasurer as per last Account	93	18	3
,, Rent	15	15	0
,, Secretary	25	0	0
,, Stationery and Stamps	12	1	4
,, Expenses of Annual Meeting	12	1	8
,, Printing of "Nature Notes"	223	18	11
(Of this £123 18s. 11d. is owing)			
,, General Printing	28	7	8
(Of this £5 8s. 11d. is owing)			
,, Sundry Expenses	6	15	2
	£417	18	0

Examined and found correct,

ALFRED T. CRAIG, *Chartered Accountant*,

26, *Theobalds Road, Gray's Inn.*

SELBORNE SOCIETY.

List of Branches, with Names of Honorary Secretaries.

ABINGER AND SHERE.—Miss Forster, West Hackhurst, Abinger, Dorking.

"ATALANTA."—Miss V. G. Parsons, Twyford Lodge, East Grinstead.

BARMOUTH, N. WALES.—D. Arthur Hughes, Esq., M.R.C.S., Barmouth.

BATH. — Mrs. Wheatcroft, 27, Rivers Street, Bath.

BIRMINGHAM.—Miss D. Sturge, Ker Yoes, Harborne, near Birmingham.

BRIGHTON.—Miss E. Bourne, 12, Denmark Terrace, Brighton.

CAMBRIDGE.—F. A. Hort, Esq., 6, St. Peter's Terrace, Cambridge.

CITY OF LONDON (St. Nicholas Club).—A. L. Dawson, Esq., St. Nicholas Club, Queen Victoria Street, E.C.

CLAPTON (Lower Lea Valley).—R. Marshman Wattson, Esq., 14, Narford Road, Upper Clapton.

CROYDON AND NORWOOD.—E. A. Martin, Esq., F.G.S., 69, Bensham Manor Road, Thornton Heath.

DOVER (Junior Branch).—Bernard F. Hall, Esq., Dover College.

EALING (Brent Valley).—H. W. Ravenshaw, Esq , 32, Albany Road, Ealing Dene, W.

FARNHAM. — Miss Marindin, Broomfields, Frensham, Farnham.

HALIFAX.—Mrs. Whitley, Brantwood, Halifax.

HASLEMERE. — Miss Buckton, Weycombe, Haslemere.

HAVANT. — Capt. J. Chippindall Healey, Old Mill House, Bedhampton, near Havant.

KENSINGTON.—Miss M. Danvers, 103, Lexham Gardens, Kensington.

KENT (Weald of.) — Miss K. Knocker, Bella Vista, Southboro, Kent.

LOWER THAMES VALLEY (Richmond).—J. Allen, Esq., 8, Clarence Road, Kew, and W. Jones, Esq., Somerleigh, St. Margarets, Twickenham.

MALVERN.—W. H. Jones, Esq., Norfolk Villa, Malvern.

"MARKWICK" (Horsham). — Miss Borrer, Brook Hill, Cowfold, Horsham.

NORTH SOMERSET.—Miss A. Fry, Failand House, Failand, near Bristol.

NORTHERN HEIGHTS. — Miss A. Martelli, 6, Prince Arthur Road, Hampstead.

NOTTINGHAM. — Mrs. Foster, The Park, Nottingham.

PINNER. — Miss M. G. Collins. Wood Hall, Pinner, Middlesex.

RAPE OF LEWES. — Mrs. A. Payne, Hatchlands, Cuckfield, Hayward's Heath.

"RICHARD JEFFERIES" (Worthing).—Miss H. Urlin, The Grange, Rustington, near Worthing.

ROTHER VALLEY (Midhurst). —Miss Richards, Easebourne, Midhurst, Sussex.

ROTHER VALLEY (Petersfield).—Mrs. Ticehurst, Petersfield, Hants.

SELBORNE AND LIPHOOK.—Miss Fowler, Liphook, Hants.

SOUTHGATE.—Selborne Boome, Esq., Headingley, Palmerston Road, Bowes Park, N.

SOUTHAMPTON AND NEW FOREST.—Rev. J. E. Kelsall, East Boldre Vicarage. Southampton.

SUTTON.—R. Hill Blades, Esq., The Firs, Sutton, Surrey.

WEYBRIDGE.—Miss H. C. Gardiner, Heathfield, Weybridge.

WIMBLEDON AND PUTNEY. —Miss Ada Smith, Walcot Lodge, Putney.

SELBORNE SOCIETY NOTICES.

Addition to Selborne Library.—The Librarian acknowledges with thanks the receipt from Mrs. Brightwen of copies of her well-known books, viz., "Wild Nature Won by Kindness," "More about Wild Nature," and "Inmates of My House and Garden."

Council and Committee Meetings.—The next meetings of the Council will be held on June 4 and July 2 at 5.30; and of the Magazine and Leaflet Committee on June 18 and July 16 at 5.30. The quarterly meeting of the Finance Committee will be held on June 4, after the Council Meeting.

Field Club Saturday Rambles.—

June 6.—Sanderstead and Purley Down. Victoria, 2.25 (East Croydon, 3; Sanderstead, 3.9). London Bridge members will come by 2.10 to New Croydon or 2.25 to East Croydon and change (East Croydon and New Croydon Stations are side by side). Book to Sanderstead. Tea at Fox Farm, Croham Hurst, at 5.30. Guide, Mr. Martin.

June 13.—Meet at Waltham at 3. Thence past the Eleanor Memorial Cross, through Theobalds Park, past old Temple Bar (Temple Bar removed June 13, 1879), visiting Cheshunt Church; thence to the Great House (Wolsey's Manor House) for tea, 5.30. Liverpool Street, 2.42. Day ticket, 1s. 6d. Guide, Mr. W. S. Durrant.

June 20.—Leave Chingford Station on arrival of 2.34 train from Liverpool Street; Clapton, 2.45. Thence *via* High Beach to Foresters' Inn, where tea at 6 p.m. Day tickets, Liverpool Street, 1s., Clapton, 8d. Liverpool Street tickets are available for return from Loughton; on tickets from Clapton there is a small excess charge. Guide, Mr. Wattson.

June 27.—Meet at Gomshall Station at 3. Thence ramble by Gomshall Marsh, Paddington Mill Pond, over Evershed's Rough to Chalk Downs. Professor G. S. Boulger, F.L.S., will kindly guide the party. London Bridge, 1.38. Cannon Street, 1.35. Return fare, 4s. It is hoped that as many members as possible will join the ramble, which is in connection with the Shere and Abinger Branch of the Selborne Society.

There appears to be some doubt with regard to membership of the Field Club, and in order to remove this the Committee begs to state that all members of the Society, to whatever branch they may belong, are free to attend the rambles, and will be welcomed. Non-members can attend on payment of one shilling per annum, which should be paid to Miss E. J. Temple, Hon. Sec. of the Field Club.

NEWS FROM THE BRANCHES.

Barmouth.—The Barmouth Branch of the Selborne Society has been very active this Spring. One of the members, an Alderman of the Merioneth County Council, exerted himself to the utmost to put in force the Wild Birds' Protection Acts. The resolution brought forward by him was warmly supported, but unfortunately lost by a small majority. It was, however, decided that the Acts should be enforced for the district of Barmouth, which is in itself a great gain.

The Branch has taken another step which might be followed by other branches in places of peculiar natural beauty. It has leased from the Urban District Council the "Panorama Hill," the show spot of Barmouth, and consequently the spot most disfigured by picnic litter. The Society will now be able to insist upon the place being kept free from litter, as the management of the small refreshment shed will be under its control.

A series of lectures has been given through the winter, with the object of keeping up interest in the Society. In March, a lecture, written by Mr. Kennedy, of Haileybury College, on the "Protection of Birds," was read by the Hon. Sec., while very beautiful lantern slides, kindly lent by the Society for the Protection of Birds, were exhibited.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:

The Selborne Society's Magazine.

No. 79. JULY, 1896. Vol. VII.

THE UGLIFICATION OF ENGLAND.

"'I never heard of Uglification,' Alice ventured to say. 'What is it?'

"The Gryphon lifted up both its paws in surprise. 'Never heard of uglifying!' it exclaimed. 'You know what to beautify is, I suppose?'

"'Yes,' said Alice doubtfully; 'it means—to—make—anything—prettier.'

"'Well, then,' the Gryphon went on, 'if you don't know what to uglify is, you *are* a simpleton.'"

THE process of Uglification, above referred to, is being carried on throughout England by means of the District Councils and similar bodies, with a thoroughness and rapidity which has already produced manifest results. Yet, so far as we are aware, no Selbornian has raised a voice in protest against operations which, small in themselves, have sensibly diminished the beauty of the country. When a restricted spot like Hampstead Heath, or a place of public resort like Kew Gardens, is interfered with, a certain amount of protest may be depended upon, although it usually happens that such protests are too late to remedy the mischief, and the stable door is not closed until the steed has been abstracted. But here is a matter which affects the lovers of nature throughout the country, and it behoves every Selbornian to make himself acquainted with what is being done, and to do all in his power to prevent further mischief.

Our own experience has indeed been confined to the home counties, but we have reason to believe that the cause for complaint is by no means limited to them. A brief account of what we have noticed will show the necessity for something being done—or rather for something being let alone, for that is what is wanted.

We were spending Easter at Old Hall, a little village

between Ware and Buntingford, and here, not only on the high road but on the by-roads, the trees have been treated in a manner which can only be termed disgraceful. As one approaches Buntingford, there is on the right hand of the road a row of hawthorns, extending for a considerable distance. These trees are not open to the objection of overhanging the road, for they are small, and are separated from this by a strip of ground and a ditch; yet the whole of the side of the trees nearest the road has been cut away, and that in the most brutal fashion. The beautiful shape and charming appearance of these hawthorns have been entirely and irremediably destroyed. In the same neighbourhood there has been a wholesale destruction of beautiful old hedges. That hedges from time to time require trimming, clearing, and thinning, is of course obvious; it is equally certain that there is no necessity for razing these to the ground, and for completely destroying the undergrowth—still less for the destruction of fine, well-grown trees, especially hollies, which have grown up in the hedge, and which form an ornamental feature in the landscape.

This destruction of hedges is going on, to our personal knowledge, not only in the county of Hertford, but in Buckinghamshire, Berkshire, Oxon and Essex; the result is that some of the most charming landscapes in these counties have been ruined. We repeat that where such destruction is necessary for the sake of the crops in the fields, or the improvement of the roads, any objection might fairly be condemned as merely sentimental; but the cases we have in view cannot be justified on the ground of necessity. But it is not only the hedges themselves that are spoilt. The hedge-banks are stripped, and worse still, the grassy strips which often add beauty to our waysides, and afford a cool refuge to the weary foot-traveller along the dusty high-road, are either removed—as in many parts of the way between Culham and Dorchester, Oxon—or pared and narrowed by one half of their dimensions. This is carried out in the worst possible way about Chelmsford. Here these strips are often of considerable width; the edge, however, is made perfectly straight, and the earth and grass removed in the process of trimming is thrown in little heaps upon the remaining grassy portion. The owner of the adjoining land is not allowed to take these away, and the result is that the portion of the grass that is suffered to remain is rendered useless for walking purposes by the constant recurrence of these little heaps. Nor is this all; on the ground thus turned over, coarse weeds, and especially thistles, take up their position, the result being a disfigurement of the roadside, and the fostering of noxious weeds to the detriment of the crops in the adjoining fields.

We do not know how this state of things is to be stopped, but unless some means of prevention be found, the Uglification of England will soon become an accomplished fact. Already it may be said, "there has passed a glory from the earth;" it is for

members of the Selborne Society to make their influence felt locally, and to do what in them lies to arrest further developments in this direction.

THE EDITOR.

AT THE WEIR.

BELOW the bridge the mill-stream turns left towards the mill, while the river flows in the opposite direction to the weir. Four long two-inch planks piled on the bank make a seat of just a comfortable height on which to rest. The sun is hot, the seat sheltered from the north-west wind by the hedge behind, and there is no shade; but the sound of the falling water on the foam-dashed boulders below the fall gives a sense of coolness even in July; the driving spray, too, moistens the air. One misses the slow boom of the mill-wheel perhaps, but the mill-house is forty or fifty yards off; there is a low range of buildings on this side, and the rush and fall of the stream over the weir entirely drowns the sound.

The weir is not built across the stream in a straight line, but in the form of a semi-octagon. This form gives me from my plank-seat a more varied view of the fall. The convexity of the octagon, if such a term is permissible, is up-stream. The two central sides form a very obtuse angle, so obtuse, in fact, as to be almost non-existent; so that although the weir is built as half an octagon the shape taken by the falling water is more that of half a hexagon. I am sitting precisely in a line with the innermost or central angle, and look almost straight across the line of water that shoots over the middle of the weir. On the farther side of the stream the water falls towards me at an angle, while at my feet the reverse is the case, so that I enjoy every possible aspect of the fall except that from immediately below.

Below the weir the water falls, not into a deep seething pool as is sometimes the case, but on to a sloping bed of rough tumbled boulders that rear their grey forms amid the cauldron of troubled foam. No doubt these are a support to the weir itself, but whether they were originally placed there for that purpose or have been displaced by the force of the water in times of flood and allowed to remain, is uncertain; they add greatly, however, to the picturesqueness of the place. The foaming torrent pours over some six or eight yards of this rocky bed before it finds itself in the pool below the dam. This pool—black, and flecked with a thousand little foam-flakes—receives, too, a strong current of water from a pair of massive flood-gates above the bridge, and the two streams meeting almost at right angles give a slow but steady circular motion to the pool, easily discernible by watching the white flecks of foam

as they move round and round upon the black tree-shaded water. One may almost imagine it a yawning bottomless pit, giving up nothing that it once receives, for the river flows out again behind a thick clump of bushes on a corner of the bank and entirely out of sight from the seat.

But on the falls the afternoon sun shines down, and the eye returns there in passive enjoyment. Between the boulders below the swift water is hidden from sight by piles of fleecy foam, heaving and tumbling, soft as carded wool; only those who have seen wool fresh from the combs can appreciate the aptness of the simile, whiter and softer even than the very choicest part of a newly-shorn fleece. And everywhere amid the tumult of foam the grey stones, streaked with the green of slippery water-weeds, rear their irregular shapes passive and motionless, yet ready, like the horns of an angry bull, to gore and batter the sides of any craft or living creature that should chance to be borne among them by that cataract of water.

The stream shoots over the edge of the weir in one smooth unbroken sheet, for, as has been said, the water does not follow the angles of the stones; but before it breaks in foam on the rocks below its smooth surface is marred. In one place near the opposite bank, a large upright stone or wooden pile—it is not easy to see which—has fallen outwards from the wall of masonry. The falling water strikes the top of this and the force of the impact throws a hundred glittering jets in every direction. Nearer me one or two boulders larger and higher than the others meet the downpour and form similar fountains; so strong are the jets of water that it is hard to realise that they are not forced up from below but are merely due to the rebound. The wind blowing strongly up the stream sways them this way and that, and scatters the falling spray on the stones below and on the banks; some drops fall now and then on my hand.

The volume of water coming over the weir seems to fall about a foot clear of the base; it may be less or more, appearances are so deceptive where there is a large body of water. The width of a river, the distance of a ship out in the bay, is very difficult to judge with an unpractised eye. Through the wall of water I can see as through very thick glass—the glass of a ship's portholes—the torrent which pours down the face of the weir (without shooting out) and the churning mass of foam at the foot. The background, the stone face of the wall, is streaked green with the water-weeds; it is wonderful that these weeds here and on the rocks below have time to grow, with the never-ceasing rush of water over them. How do they get a start, and how is it that the first tiny shoot is not swept away and lost?

At the edge of the weir where the water curves into convexity the sun is reflected in a line of gold all across the stream. It is as bright as a reflection can well be, being focussed, and the rays strike the curve almost direct, the sun being now well down

towards the west and the curve being greater below than above the edge of the weir. It is very beautiful, this liquid quivering line of gold, and below, seen through the thick water glass, the cool streaming face of the weir.

Above the fall very little movement is apparent on the surface of the water, it is glassy and still. The large coarse leaves of butterbur grow luxuriantly on the banks, and here and there is the beautiful heavenly blue of forget-me-nots. An ash on the farther bank has grown with four or five feet of its trunk stretched horizontally over the water; the rest of the main stem leans so far across the stream that the topmost boughs almost overhang this bank Beyond this tree tower the mill buildings and warehouse—a hideous erection of flaring red brick —an incongruous eyesore amid its placid surroundings; more to the left is the dwelling house which, with true bucolic indifference to scenery, turns its back upon stream and weir, and faces the muddy level of a canal.

The ash tree grows in a little croft, or rather orchard, for it has been recently planted with fruit trees. On the river bank there is a thin fringe of currant bushes, the red fruit glowing in the sun. When I was here two or three weeks ago the air was full of the scent of the hay which lay in "swathes" in this orchard. Now the grass is clear and the thunderstorms of the last ten days have already painted it a brilliant fresh green. Though this year's grass crop may be light, the generality of farmers will have "got" their hay in the pink of condition and may look, too, for a good aftermath.

I am one of those for whom running water has a wonderful fascination. When I left the road and sat down on the plank I meant to rest for five minutes only; I have sat here without stirring for more than an hour. When the eye has searched out and remarked every detail of the scene, the hundred beauties of the weir, the pool below, the ash tree and the orchard, it returns to dwell with quiet enjoyment on the swift-sliding water, the frothing foam and the dancing spray. The noise is not loud enough to stun the ear, though it would make conversation difficult if I had a companion. But I am alone and the voice of the fall needs no reply. And I still sit, while the shadows lengthen in the orchard and the north-west wind gradually drops and the still calm of evening draws on.

This is a day of activity, a day of sight-seeing, from scenery to exhibitions. And yet for some of us the happiest hours are those spent as I have spent this golden July afternoon, steeping myself in the sensuous enjoyment of common-place mid-English stream and meadow.

ARTHUR O. COOKE.

AN EGYPTIAN PET.

HEN I first heard that a lady in my neighbourhood possessed a live bulbul, my thoughts flew at once to "Lalla Rookh," with its visions of moonlight serenades, dark-eyed beauties, and all that surrounds the Eastern harem life. I had, in fact, only a vague notion that the bird was a sort of nightingale more or less resembling our own sweet woodland singer. I was, however, destined to know more about it, for it has come to pass that I have now the precious bulbul in my care whilst its owner is absent from her home. Possibly a few notes about such a rare bird may prove of interest to Selbornians.

There are several species of the bulbul; this particular one came from Egypt, and is often called the Persian nightingale (*Pycnotus xanthopygius*). In appearance it is quite unlike an English nightingale. The head, throat, tail, and legs are jet black, the rest of the body being a uniform grey tint with a patch of bright yellow beneath the tail. In size the bird is between a starling and a robin, sleek of plumage, well built, full of activity and intelligence; its black eyes with their prominent grey rims are ever on the watch for mischief of some kind; evidently the bird's active brain must find an outlet in action, and in consequence, when released from its cage, it is never still for a moment.

Soon after five o'clock in the morning I open Bully's cage door, and with a joyous whistle of delight the bird flies to me, and perching on my hand, invites attention by his quivering wings and low warbles of affection. Bully is like a parrot in loving to have his head and throat caressed; while I tickle his plumage, he opens his beak quite wide as a token of appreciation, softly holding my finger at intervals and pinching it more and more as if to ascertain how far I can bear the pressure without flinching.

Whilst I am quietly reading, I can well observe the habits of this lively bird. He delights in turning over all he can find upon my toilet-table, and one by one, scissors and buttonhook, collar and cuffs, everything portable, is thrown down upon the floor. One morning I was surprised to see a sort of tropical butterfly careering through the air, but it was only Bully, chuckling with delight as he bore my lace tie round and round the room, evidently in great spirits at the amount of mischief he had already done in scattering my small properties, but now still more enjoying a triumphant flight with this new trophy. I only mention these trivialities to show the bulbul's active, vivacious nature, and how he certainly can lay claim to the character of a very entertaining companion.

I cannot say the bulbul has a very pleasing voice; its song consists of a great variety of loud clear whistles monotonously

repeated. When left alone I sometimes heard Bully warbling rather prettily to himself, and I should fancy if patiently instructed when quite young, such an intelligent bird might be taught to whistle tunes, or even to speak a few words.

This bulbul often reminds me of my beloved Virginian nightingale, "Birdie"; he has the same kind of quick, bright manner, and certainly no bird could well be tamer or more affectionate; he seems perfectly happy if allowed to sit on my arm or shoulder and feel the touch of a kind hand caressing his soft feathers. Bully's diet consists of fruit, either dried or fresh, mealworms and flies, and some soaked bread as a variety. When set at liberty, before doing anything else, he makes it his conscientious duty to kill every fly in the room, so his presence is highly desirable during the summer months, when all kinds of winged creatures seem to flock to the window panes. One morning I found twenty-one dead bluebottles slain by the bulbul, who, with erected crest, stood whistling joyfully over their remains.

Seeing his own reflection in a looking-glass draws forth his sweetest warbling notes, for, with all his high intelligence, the bird seems always deluding himself with the idea that he has found a mate, to whom he whistles with much unavailing ardour.

When I first uncover the bulbul in the early morning, his joy and affection seem to throw him into a kind of ecstasy, he humps up his back, and depresses his head and tail, opens wide his beak and gurgles forth a sweet and touching greeting of deep affection, swaying his head from side to side; as he sings he gazes at me, too entranced to think of food, or liberty, or anything but love.

I have never before heard of a bulbul kept in captivity in this country, but the habits of the bird are so charming, and its ways so playful and full of character, that it seems to combine almost all the qualities one can desire in a feathered pet, and one cannot but recommend it to students of domestic bird life.

ELIZA BRIGHTWEN.

A Blackbird's Nest.—Is not the porch of a suburban house a rather unusual place for a blackbird's nest? We always feed the birds all the year round, and both last winter and the one before have had blackbirds, thrushes and tits among the crowd of starlings and sparrows as our welcome guests. Last month a pair of blackbirds built their nest on a ledge in the woodwork of our front door porch, partly supporting it by stems of the clematis that is trained there. The hen has been sitting for thirteen days and does not seem at all disturbed at the frequent knocks and rings, and the many openings and shuttings (often noisy ones) of the hall door. I should be glad to know if there are many instances of such trust shown by those unusually shy birds.

M. C. T.

BIRD LIFE IN JUNE.

A COUNTRY garden is peculiarly interesting at this season from the number of young bird families which one may have under observation in quite a small area. Here my walks are made delightful by constant apparitions of young birds in the hobbledehoy stage, to use rather an expressive term. Delightful scenes of maternal affection may be witnessed on the grass in front of one's very windows. I have seen a young blackbird hobbling, or rather lurching, after its mother, shrieking with rage if its wants were not supplied fast enough to suit its voracious appetite. Some young birds are much more fearful of man than others.

On one occasion I found a young thrush able to fly sitting in a dead yew tree. It was such a pretty little thing, with fluffy tufts just above the eyes, and every part of its plumage so bright and fresh. I walked close up to it and lifted my finger to stroke it, when behold it opened its beak in a gape as though it would take in my finger and myself as well. On the other hand, a nest full of young robins became violently excited when I approached them, and would jump up and snap like jacks-in-the-box, and try and peck at my intrusive finger.

I have seen few prettier sights than a family of greenfinches balancing themselves on the slender swaying points of a cedar tree; the male bird, glorious in green and gold, keeping up a continuous "wheeze, whee-e-z," and the four or five greenish-brown youngsters, hardly to be distinguished from their mother, so well-grown and strong are they. Another pretty sight was afforded when three or four young starlings poked their grey heads and yellow throats from a hole in an old apple tree wreathed with honeysuckle, formerly the abode of a lesser spotted woodpecker. Some birds are thinking of and preparing for a second brood, and the cuckoos are again busy searching for hedge-sparrows' and other nests wherein to deposit their eggs.

The chorus in the mornings is not so full and varied now, but yet many songs are heard in the garden, especially after rain. The thrushes seem indefatigable in carolling their exquisite song, the easiest to put into words I know. The nightingale, which can have had very little sleep during May, singing as he did all day and night upon the lawn close to our windows, has at last ceased to sing; somewhere in that thick undergrowth, through which I have hunted in vain, getting hot, cross and most frightfully nettled, is his nest, filled with hungry youngsters whose wants *must* be supplied. No wonder he has no time for song now! And how we miss that wonderful song—how silent the night seems without it, that wonderful liquid trill, so different from any other song, divided into short exquisite phrases, each full of music, yet each so different. Now the nights seem silent in spite of the unceasing jarring note of the

corncrake and the occasional hoot of owl or squeak of bat, or even the sleepy note of a wakeful cuckoo.

Young blackcaps have flown, and chaffinches have hatched a second brood, when the spotted fly-catcher is only thinking about his first. Short as the time is since his arrival he seems to have been here always, so familiar is the slender grey figure perched so upright and alert upon the tennis net or some post or dead branch, anywhere where he can have an uninterrupted view around him, and a clear space in which to make those delicious dancing, darting flights by which he captures his airy prey. A very favourite bird of mine is the swift with his bold splendid flight and curious, though not unmusical, scream. In the nearest town just before a thunder storm I saw him to advantage, darting along on a level with the house-tops, chasing his companions and being chased in turn, screaming with delight, as it seemed, at the prospect of rain. A bird of the storm he always seems to me, who have watched him hundreds of times, when the air was most breathless and the heat most oppressive, almost a speck against the blackness of the thunder clouds, balancing himself, motionless, as it appeared, high above the earth, the familiar spirit of the thunder and the wind.

There is much to be been in a garden in every month of the year, but to me May and June are the two which are above all others. In them are combined all the delights of life—sweet smells and sounds and the hundred-and-one lovely pictures which a plentiful bird life can afford the inhabitants of England.

MARGARET L. ANDERSON.

Gainsborough, Lincolnshire.

EPPING FOREST AT NIGHT.

HOUGH the Forest, now that the Corporation has taken it over and appointed rangers, no longer enjoys the reputation of being an Alsatia after dark, still in the summer months a certain number of tramps turn gipsy and make for themselves an *hôtel à la belle étoile* within the thick clumps of brambles. Hence the wayfarer who prefers his own company to theirs would do well to select for his nocturnal perambulation one of the warm, dry, moonlight nights in April, before these folk are abroad. At that time the only persons likely to interfere with his researches are the rangers, but those well-attired gamekeepers think, quite rightly, that vigilance in April is unnecessary. On the other hand there are some human voices to be heard which are innocuous and even comfortable to the ear. From one o'clock till four the dim outlines of hay-carts and straw-carts slowly take their creaking way down the high road in the direction of Whitechapel market. The driver, usually asleep on the summit of his load like a

Jebusite upon his house-top, rouses himself occasionally to hurl an encouraging grunt at the horse to keep it awake and going. Opposite the cheerful lights of the half-way house—where the carts accumulate in a crowd, whilst man and beast, but principally man, are being refreshed—is another human being not quite so innocuous, who stands on guard there either with the idea of keeping the peace, which is unnecessary, or on the chance of being invited inside to quench his thirst, which is unlikely; he inflicts a discourteous stare on the wanderer, who quails not, having visible means of subsistence in his pocket.

All this time that little drunkard the nightingale has been pouring out snatches of one song after another, tipsily and irresponsibly changing according to his passing mood from grave to gay, from a rollicking Bacchanalian chuckle in praise of the jug to a long drawn whine, the *pianissimo* commencement of which has a strong ventriloquial effect. For a few moments the gaiety of a single lark turns night into day, and a cuckoo afflicted with insomnia complains in the valley. Disturbed in their privacy amongst the reed-beds the mallards flock together with a whirr of wings and an outcry which extorts a sympathetic echo from the moor-hen; they are given to alarms and excursions at this time of the year, when their wives have just given hostages to fortune to the extent of nine or ten ducklings apiece.

Close to the high road a cricket appears to be making a disproportionate clatter, but the sound, when followed up into the wilderness of heather and pond and bramble, continually recedes like a disembodied and restless sewing-machine, till at length, some hundred yards away, it resolves itself into a grasshopper warbler. Now *crescendo*, now *diminuendo*, the interminable reel goes on with just a moment's breathing-space once a minute, an instance of wonderful lung-power produced by cultivation and the influences of heredity. The bird's loquacity is, if anything, more pronounced at night, when he seems to be stimulated by the curtain of darkness and the presence of the invader, whom he will allow to come within a yard, to exhibit himself, half in mockery, half in sociability to the very best advantage; but let the stimulus go, and he will stop for some minutes, palpably disappointed.

After two o'clock the bibulous efforts of the nightingale begin to slacken, the moon sinks, and the pilgrim is left alone in what now becomes "the tragic melancholy night," with the snoring frogs and the diving rats. But not for long. An hour later the blessed cock crows, and soon a weak and doubtful light shows itself over Lack's hill an hour and a-half before the sun is allowed to rise by the almanacks. But that master of the ceremonies, the thrush, with an excusable ignorance of Whitaker, chooses the present moment for attacking his *fantasia*, eliciting thereby a drowsy remonstrance from the tawny owl, who all the night long has preserved an inexplicable silence.

Presently the woods stand revealed in the silvery twilight,

the cold morning wind blows, drenching the grass with dew, and great Pan awakes. The blackbirds take up the challenge of the thrushes, and by sheer force of numbers sing their cronies down. From Copped Hall Park comes the cough of the pheasant, which acts like a milkman's jödel upon the ring-dove and the sleepy robin, the latter essentially a cold-weather bird, who opens the concert in winter but in summer proves the laggard; and these two add their quotas to the *olla podrida* of melody. The wood beyond the road-margin is already brimming over with natural music, and now it receives further additions in the sweet succulent hotch-potch of the redstart and the tree-pipit's unassuming treble. It seems rather extraordinary that these delicate summer migrants should have the spirit to sing in the very coldest part of the whole twenty-four hours; but the pipit, at any rate, is on the verge of being acclimatised, or would appear to be, as he sometimes spends the winter on our hills, in which case he may be seen any sunny day in February soaring, diving and singing to his mate. The next to break silence is the family of tits, the little blue variety waiting as usual till his big brother has finished the cantering song and subsided into the customary sea-saw.

Passing by several other songsters of less interest we enter Monk's Wood, where just before sunrise the missel-thrush utters a few ringing notes—only a few, because his unique season for music, which lasts only from November or December to May, is nearly over, and his gaiety is limited in consequence. Hard by on the trunk of one of the oldest beeches the green woodpecker utters his first maniacal laugh, when he looks round the trunk and sees the sun rising; the sycophant starlings squeaking idly on a bough take their cue from him and begin to bubble and squeak. And now that the air is becoming warmer the rest of the summer migrants express their satisfaction in fluid language; the chiff-chaffs first, and after them the morning nightingales, which are probably not the same as the singers of the night, both on *à priori* grounds and also because they are not heard in the particular spots that rang with the moonlight serenades; and the song is inferior in timbre, there is a rift in the lute somewhere; perhaps they are younger birds that have not fully acquired the habits of their species. Still they put their conscience into the song, until the whole body throbs with every note, and when the impudent willow-wren perches on a higher branch of the same oak and repeats his delicately-finished melody, it is merely the attempt of an Offenbach to match the merry tunes of "La Fille de Madame Angot" against the music of "Tannhäuser." In the density of the thickets that border Chingford Green the nervous white-throats are beginning to fidget, and last of all their neighbour, the black-cap, whose headgear is not so black as it is painted, opens his eyes and runs up and down the scales of his flagelet in a melodious rigmarole.

W. A. Fox.

AN EXCELLENT POSTER.

We have received the following admirable handbill, which Miss Frances Power Cobbe has prepared and has had distributed in the neighbourhood of Barmouth :—

Y DRAENOG.

WHEN TO KILL THE HEDGEHOG.

When you wish your fields and gardens to be overrun with Mice and Voles,

Then kill the Hedgehog who destroys them!

When you wish Snakes and Vipers to crawl about plentifully,

Then kill the Hedgehog who kills them and eats their eggs!

When you particularly desire that Caterpillars, Grubs, Wire-worms, Beetles and Slugs should increase and multiply, and eat up every green thing,

Then kill the Hedgehog, whose food they are, and who is the principal INSECTIVOROUS creature in this country, placed here by Nature to keep the balance.

When you are so great a donkey as to believe the silly old story (which was laughed at a hundred years ago by Pennant as a Welsh superstition) that this creature—with its small pretty mouth, not wide enough for a baby to poke in the tip of its little finger—is able to suck the big teats of the cows and draw the milk,

Then by all means go out valiantly, like brave men and boys, armed with sticks and stones, against this poor little, harmless and useful beast, and pound and kick and trample it to death. That will be about just as wise as it is humane and merciful!

If you happen, on the contrary, to wish that the numbers of mischievous Mice, Voles, Vipers, Caterpillars, Wire-worms, Beetles, Slugs and Snails be kept down, and if you are not quite such an idiot as to believe the rubbish about the Hedgehogs milking the cows (when you can see with your own eyes that it is impossible for them to do anything of the kind)—then—pray,

DON'T KILL THE HEDGEHOG!

*** Did you ever observe that people who don't milk properly, and those who steal the milk, are very fond of talking about the DRAENOG, and how she certainly must have sucked the cows last night?

SCIENTIFIC CURIOSITIES.

Under the above heading, M. Henri de Parville writes as follows in the *Independance Belge* :—

Animal Understanding.

ANIMALS are decidedly so intelligent that it frightens me sometimes. An observer, very clear and precise, that I know well, sends me two fresh proofs of the intelligence of animals; they are most curious, and, if they did not come from him, I should doubt their authenticity. Here are the facts :—

My attention was often drawn, he writes, during a stay in the country of some months, to a cow lying upon the grass ; multitudes of flies wandered over her nostrils and the balls of her eyes. Now, a fowl came always at the right time, the same one every day ; she mounted upon the head of the cow and passed hours in picking from the eyes and nose the importunate flies. The cow and the fowl here found evidently each their reward ; the cow allowed this, without fear of the pecks of the beak, and the fowl installed itself there quite at home without the least fear. How did this little arrangement originate ? Was it the cow who devised this means of ridding herself of the flies ? Was it the fowl that started the idea ? Do animals possess a special language ? How do they make themselves understood ? It is always the fowl that comes during these months to the help of its large neighbour of the cow-shed. One has always need of someone smaller than one's self.

The second observation of my correspondent :—

There was, said he, at the Luxembourg, in the interior court, when the prefecture of the Seine, afterwards the Commune, occupied the premises now devoted to the Senate, a cage in which a parrot strutted about. One day I noticed a sparrow, who perched on top of the cage. Straightway the parrot mounted slowly from perch to perch, then he placed his head against the top of the cage. The sparrow thrust his beak through the bars and set to work to scratch gently the head of his friend. When the parrot had had enough of this, he descended again gravely from perch to perch, and the sparrow received the reward for service rendered. The parrot, with his claw, pushed the scattered grains close to the bars and the bird took them one by one, enchanted with the good windfall. Is it chance which has presided over these complex operations ? Evidently not, they are too well connected. There was an amiable convention between the two birds, and a reciprocal loyalty in the execution of an engagement. These little beings have evidently, adds my correspondent, equally with human beings, intelligence, and with them are examples of honesty in their transactions which may well be always followed.

Apropos of foretelling the weather, many agriculturists admit

that animals are able to inform us upon the clemency or severity of a season. We are not so convinced about it as they are. Nevertheless, there is room to place together all the facts which militate in favour of this hypothesis. M. Paul Noël, for example, Director of the Regional Laboratory of Agricultural Entomology, admits, voluntarily, that insects, by their mode of procedure in different acts of their life, are able to furnish elements of prognostication.

At the commencement of the winter of 1895, he says, I had to predict to the cultivators of Normandy that the winter would be almost naught, since I had remarked what little precaution the insects and even earth-worms had taken to protect themselves from cold. To-day, he adds, I believe I can prognosticate that the spring will be a damp one in Normandy, and I rely in making this provision upon a curious observation that I have already had occasion to repeat several times. If, in the month of February, the frogs deposit their eggs in places feebly supplied with water, that will become dried up with the least sunshine, one can conclude almost surely that the spring will be humid, for the frogs are never mistaken, and do not deposit their eggs in pools or places badly furnished with water, and where the liquid cannot remain during the period relatively long and sufficient for the young tadpoles to become developed quite at their ease. Now, in 1896, the frogs of Normandy have deposited their eggs not only in pools well filled, but also in the little puddles of water, which can only give asylum to the tadpoles if plenty of rain falls to avoid the complete drying up of these feeble amounts of water.

Then, according to M. P. Noël, here are the frogs as prophets of the weather. We have already the tree frog and his spawn; but it has been proved in America that the frog has made fun of us. Let us hope that the Norman frog will be more serious. We shall see if the spring will be a moist one. It will not be difficult, alas!

Eels and Peas.

Everybody knows, nowadays, that eels leave the streams and make excursions sufficiently far from their banks into the fields. Eels chase insects, and devour willingly enough, they say, cereals. It is affirmed, even, that they eat peas. M. Fiston has made the same observation in the department of the Meuse.

He had planted at 150 yards from the Ornain, a river where eels are abundant, several plots of peas. He remarked that a certain number of the pods were gnawed and even cut clean, as if by a cutting instrument. These damages were done in the night time, when it was foggy or when the fields were covered with dew. M. Fiston attributed this damage to field-mice. But one day his gardener came and told him that, having gone to the field in the early morning, he saw "serpents," which fled on his approach and regained the river. There are plenty of vipers in

the country, but they are not accustomed to throw themselves into the water and eat peas. To clear up matters, on the morrow, M. Fiston, at early dawn, repaired to the field. He threw a stick into the middle of the peas; immediately he saw come out and go towards the river a dozen eels. It was they, indeed, who ate the peas, for he found quite fresh traces of their feast. Eels, then, wander upon the land and, without knowing it, one may eat *anguilles aux petit pois!*

GILES A. DAUBENY.

SELBORNIANA.

Our Society.—I attended the Annual Meeting, and with other members was delighted with the excellent addresses delivered by the Chairman and other speakers, but so much time was absorbed that I was unable to ask a question that might have led to some discussion, namely: Whether any attempt has been made to enlist the sympathy and co-operation in our cause of persons abroad? It seems to me that this is a matter of considerable importance, for without such help how are we to prevent the extinction of such animals as elephants, lions, kangaroos, and the giant tortoises of the Galapagos Islands? I should like to see the Selborne Society a world-wide institution, and with the English as the premier nation and the English-speaking race the predominant one, does it not look as if our Society might extend its arms far and wide? What an achievement it would be if, in these cosmopolitan days, our organ, NATURE NOTES, were printed in different languages! To me it seems to be an ideal to work for. That there are many ardent Selbornians in heart and soul on the Continent I am persuaded. In Germany, natural history and botany form a part of the national teaching in the schools, and I was much struck by the way in which the wild birds are cared for; in the public parks in the great towns they are regularly fed during the severe cold of the winter, and outside the kitchen window of every flat, where there is a large shelf for putting meat and other articles of food under wire netting covers, the cook will every day place scraps in a plate for our feathered friends. It may be that there are similar societies to ours on the Continent, if so, could we not become affiliated with them, so as to help one another by interchange of ideas, loan of plates for publication, &c. To carry out to the full our great yet pleasant work, it seems to me that the co-operation that I have suggested is necessary.

Slapton, Kingsbridge. GILES A. DAUBENY.

Protection of Wild Birds.—In the *Almanach Hachette* published in Paris occurs the following note:—"During the course of the month (last limit 30 June) the placarding, in each commune, of the laws and orders prohibiting the destruction of birds' nests or the taking of birds by lime, &c." Have we anything to learn from our neighbours in this respect?

Slapton, Kingsbridge. GILES A DAUBENY.

Sir William Flower's Address (pp. 121-125).—We regret that, by an oversight for which the Editor is not responsible, the report of Sir William Flower's address at the Annual Meeting was not submitted to him for revision. Two important corrections should be made: p. 122, line 5 from top, for "Belgium" read "Portugal"; p. 123, line 22 from bottom, for "wood-warbler" read "water ousel."

Kew Gardens.—I was very glad to read in the May number of NATURE NOTES a protest against the gradual spoliation of Kew Gardens. Not only have numerous noble forest trees been felled, but a dead set seems to have been made against evergreens. The fine old shrubberies near the Pagoda have been cleared, apparently for the object of making visible the neighbouring suburban villas. The avenue of deodaras in the Pagoda vista has been ruined, so has the quaint beauty of the little garden near King William's temple. The conifers and rhododendrons near the temperate house have been uprooted, till it stands out

gaunt and bare as a factory. Wherever one wanders in Kew Gardens, one finds the mark of the spoiler; until one looks at the most lovely and cherished bits with a fear, that their destruction is only a question of time. The Director may be a shining light in the world of science, but it is evident that he is destitute of an atom of artistic feeling. The wildness of sylvan nature, and the picturesque trimness of antique gardens, seem alike distasteful to him. As the nation has to pay for the maintenance of Kew Gardens, we have a right to protest against their being degraded into something between a cockney tea-garden and a nurseryman's ground. S. E.

A Note for Ramblers.—The attention of the readers of this journal has frequently been called to Mr. Walker Miles's *Field-path Rambles*, a series of admirable guides to the finest scenery of Kent and Surrey. The success of these little books is in no small degree due to the excellent discretion used in the selection and arrangement of the routes, and to the wonderful precision with which the latter are described. Moreover they open up to the Londoner districts which he has never visited, and of which perchance he may not have heard. Unfortunately the preparation of these handbooks requires the exercise of great industry and care, and as a natural consequence the production has not been so rapid as could be wished. In the future, however, the rate of publication is likely to be doubled; for there is now associated with Mr. Miles a colleague, Mr. Alf. Holliday, who has undertaken the description of a series of rambles, to be completed in four parts, on the north side of London. The first part—*Over the Northern Heights* (R. E. Taylor & Son, 19, Old Street, London, E.C., price 6d.)—has just been issued, and provides a number of country walks between such points as Hampstead, Hornsey, Harrow, Edgeware and Barnet. Brief items of information are given about any objects of interest that may be passed on the way; and though time forbids the application of a practical test to the book, one may fairly conclude from the minuteness of descriptive detail that the directions are as accurate as circumstances could require. One hails with delight the prospect of escaping from hot, dusty London, and of enjoying the manifold benefits of fresh air and scenery in the easily accessible neighbourhood recommended to our notice by Mr. Holliday. A. G.

NATURAL HISTORY NOTES AND QUERIES.

Robins in Kew Gardens.—Any of your bird-loving readers who frequent Kew Gardens, may spend many happy hours, as I have done this spring, in the society of unusually tame and friendly robins. One of them, whose home is amongst the tangled, ivy-grown bushes in the centre of the fernery, comes to meet me every morning as I enter by the Cumberland Gate. He takes food from my hand, and often sits by me and warbles his thanks. For the last two months I have had the privilege of knowing all about his domestic affairs. I have watched him feed his mate, and later on his little family of brown speckled robins, who cannot yet claim the title of redbreasts. Then in the rhododendron dell, I have many other acquaintances in the robin world; they fly towards me as I go along the walk, and sometimes utter a little burst of song to attract my attention. Of course I am always well provided with stores of suitable food for them; crumbs of soft biscuit, sponge cake or suet pudding. It is really astonishing how these birds recognize me and closely approach me, even when the gardens are full of visitors. So much may be learnt of the ways, habits and dispositions of birds by studying them in a place where they are carefully protected, and where the gardeners and keepers seem kindly disposed towards them.

Springfield, Kew. T. SPENDER.

London Moor-hens.—Your readers may possibly be interested in a few notes about a pair of moor-hens, who have made their home on a piece of water close to our vicarage here. The nest was placed in a most conspicuous position, resting on an exposed portion of a sunken tree trunk, and absolutely unshrouded by boughs or herbage of any kind. From the opposite bank, at the distance of less than ten yards, the bird could be watched sitting on the eggs hour after hour.

It was specially interesting to see how each parent bird took its turn on the nest, and more than once I and my children had the opportunity to see the one leave and the other return; and to note the call, by which the one bird seemed to intimate to the other that the time for change was come. Each time a bird came afresh to the nest a good deal of shuffling took place before settling comfortably down, and this we took to be a process of turning the eggs over, but of that I could not be certain. In due time a brood of seven was hatched, and within a few hours all took to the water, being carefully attended by both parents. The nest seemed to have been deserted for some days and then they all returned to it one night, and here a sad mishap occurred, which was witnessed from the bank. One little chick fell off the nest upon its back into the water, and being unable to right itself and receiving no parental assistance, so perished. Each night now the brood return to the nest to roost, and they nestle under the parent's feathers all night, and it is strange to note how a fresh bed of green leaves and grass has been laid upon the nest, as if to make all clean and sweet for their reception. They are now more than ten days old and doing well. The piece of water is enclosed within the grounds of a private house, which is now used for the residence of some aged men who have seen better days, and some of them have sat for hours watching these birds and their little family, and I think you will agree with me that it is not often that such admirable opportunities occur to note the home life of these shy birds within the limits of the London Postal District. We have also another pretty bird home to watch quite close at hand, and that is the snug nest built by a pair of robins inside an old water can that hangs upon a birch tree bough in our garden ground. Some weeks ago I hung up the can and hoped that it might prove, as it has done, a tempting home. Only on Saturday, too, we saw a diligent little creeper examining carefully the bark of an old accacia hard by our dining-room window, and perhaps we may have the delight to see them build behind the bark that here and there gapes open on the trunk. Two years ago a nest was begun in this same tree, but was molested by some passer-by on the road and never finished.

Bowes Park, N. A. C. ALMACK.

Blindness in Horses (p. 57).—In connection with this I should like to mention a somewhat analogous case given by Darwin in his "Origin of Species," p. 107 of the 1894 edition, where he says "What can be more singular than the relation in cats between complete whiteness and blue eyes with deafness?"

Slapton, Kingsbridge. GILES A. DAUBENY.

Partridge carrying Young (vol. v., p. 177).—Darwin apparently did not believe in wild birds carrying their young, for at page 197 of the 1894 edition of his "Origin of Species" we read: "If the hen gives the danger chuckle, they will run (more especially young turkeys) from under her and conceal themselves in the surrounding grass or thickets; and this is evidently done for the instinctive purpose of allowing, as we see in wild ground-birds, their mother to fly away," a rather heartless proceeding on the part of the mother, I think, and not very easy to believe. GILES A. DAUBENY.

The Food of the Eagle.—A Swiss hunter has succeeded in taking in the Alps the nest of an eagle. There were found, by the side of an eaglet, a hare recently killed, twenty-seven feet of chamois, four pigeons' feet, thirty pheasants' feet, eleven heads of fowls, eighteen heads of grouse, and the remains of a quantity of rabbits, marmots, squirrels, &c.

The above, from the *Independance Belge*, is interesting not only as showing the food of eagles, but it makes it clear that the chamois, though much reduced in numbers, as we know, is by no means extinct in the Alps.

Slapton, Kingsbridge. GILES A. DAUBENY.

A Winter Cuckoo.—While thanking Miss Corbet for her most interesting paper, may I ask an explanation of the words "Knowing of cases in which birds poison their young when unable to set them free." Is it really meant that young birds have been medically examined and poison detected? If so, what was the poison? I hope I shall be forgiven for saying that something more than a surmise or inference is required to establish so startling a fact. Mr. Teget-

meier's dog, that committed suicide through jealousy, would be a somewhat parallel case ; but unfortunately Mr. Tegetmeier has himself declared it to be fictitious, though reprinted as true.

F. M. MILLARD.

A Rook Query (p. 118).—I have seen one or more rooks tearing off bark from an elm in the Mote Park, near Maidstone. There can, I think, be little doubt that the branch was dead or dying, and that there was a loose end or flap of bark to lay hold of at first starting. But when a beginning was once made the bark was torn away from the upper side of the branch for several feet. I supposed it was used in building the nest. I should imagine the "balancing" action to be a different thing ; at any rate, what I saw could not well be mistaken for "balancing." I do not think sound, healthy bark would be taken.

Otham, Maidstone. F. M. MILLARD.

Golden Oriole.—On Whit Sunday last, May 24, in the evening, my brother was walking across Holmbury Hill, near Abinger, Surrey, when there flew out from a gorse bush a splendid golden oriole, making its peculiar cry, and rapidly disappearing into the neighbouring woods. No nest could be found. As this bird is said to be found in the loneliest of spots and near the outskirts of forests, a better situation than Holmbury Hill it could hardly have chosen. I thought the rarity of this visitor was sufficient apology for recording its appearance, especially so near London.

ELDON PRATT.

Concerning Moles.—From an intelligent man who has followed the occupation of mole catcher for many years, I learned the following :— No creature works harder than a mole. It makes its tunnel with a perpendicular shaft at the end, up which it comes tail first, throwing up the earth, returning to fetch another mass. Seldom more than six young are found in the nest. They only breed once a year. There are differences among them. For example, one mole, after being caught, will seize and devour a worm placed near its mouth ; others, more timid, will not touch it. Their way of feeding is most interesting. The worm is seized by the head, and held between the fore-feet, which are made by a quick alternate movement to press the earth out of its body. My friend said it was absurd to speak (as the Rev. J. G. Wood had) of a mole skinning a worm before eating it. When a mole is at work a blackbird will stand near to pick up the startled worms as they come out. When the mole catcher takes a nest of young ones, the crows wait to carry them away for food. They never take a dead old one. But the most interesting fact given was this, that when a worm is touched by the nose of a mole it seems paralysed, and does not try to escape. My friend had repeatedly verified this. He showed me as a curiosity one of fawn-colour, which he had captured and stuffed.

Hexham. I. E. PAGE.

A Remarkable Spider.—On St. Valentine's day of the present year, while walking in my bush garden, I was attracted by the appearance of a young peach tree, the foliage of which had contracted a somewhat rusty and pest-stricken look, and seeing a bit of withered curled-up leaf lying upon the surface of one of the green leaves, I put out my hand to pick it off, when, to my amazement, it ran away. It was a living spider ! But lying curled-up there on the green peach leaf, its legs carefully stowed away underneath, only the rusty brown wrinkled upper surface of the body revealed, it had no more resemblance to a living creature than a flint stone had. It was, to all intents and purposes, a bit of withered leaf. On closer examination the back of the creature was seen to bear a ghastly resemblance to the human countenance, the nose being represented by a curious little yellow cone which rises up in the centre of the abdomen, the use of which I should much like to know, if any learned arachnidist will kindly impart the information. A small crab-like spider is found on the sandy plains of this district, which forms a beautiful little tent dwelling by tying down the corner of a peppermint gum leaf (*Eucalyptus amygdalina*) to the shape of the ordinary military tent, and living in the apex thereof quite secure from observation. A slight aperture is left between the level surface of the leaf and the bottom of the tent, as marked by the dotted line, for egress. Presumably the

inmate comes out at night to look for prey, or else subsists on small insects which crawl under the tent flap seeking shelter and hospitality, only to find sudden death drop upon them from above.

Table Cape, Tasmania. H. STUART DOVE.

Summer Migrants.—The following are the dates of some of the migratory birds in this neighbourhood to compare with Mr. Hiam's list for Worcestershire:—Chiff-chaff, March 22; wryneck, 25; blackcap, 27; willow warbler and cuckoo, April 17; tree-pipit, 18; whitethroat, 19; nightingale, 20; sand martin, 21; swallow, 22; sedge warbler, May 1; swift and turtle dove, 10; wood warbler, 12; nightjar, 16.

Frensham, Surrey. HELEN MARINDIN.

Summer migrants in the neighbourhood of Southsea:—arrivals first noticed on March 22, chiff-chaff; March 19, wheatear; April 15, nightingale; April 19, swallow; April 19, wryneck; April 19, whitethroats in large numbers; May 5, swift; May 11, nightjar.

Southsea, Hants. J. E. H. KELSO.

Peewits and Rook.—One day I saw a pair of peewits engaged in a fierce conflict with a rook or jackdaw, which was evidently interfering with their eggs. The field was sown, and among the furrows, bare of green, the birds had made their nest, such as it is. They dashed upon the intruder, now one, then another, until it was glad to get away. I watched them as they beat it with their wings till it escaped over the fence.

Hexham. I. E. PAGE.

Temperament in Animals.—The fact has often been noticed how in a herd of cattle, one is leader. A man who was driving a cow along the road told me that among theirs one beast, not older than the others, always drank first at the trough, and alone. The others drank together, two and two; this one never. If another came near, it would fight it. Have some animals, like some men, a larger selfishness or love of power?

I. E. PAGE.

Oxen in a Storm.—A heavy cloud moved over a Cumberland dale, finally breaking in lightning and thunder near a farm house. Eight cattle were grazing in a field, and, evidently terrified, they stood in a circle with their heads all together in the middle of the field.

I. E. PAGE.

TO CORRESPONDENTS.

M. P.—Both are forms of *Antennaria dioica.*

Strathmore.—Bird's foot trefoil and red clover. You should get some simple English Flora.

C. R.—*Saxifraga granulata.*

E. L.—The caterpillar is no doubt that of the goat moth.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

New Branch.—The Council has pleasure in announcing the formation of a new Branch at Melbourne, Derby; Rev. Arthur Myers, of Cliff Cottage, being the Honorary Secretary.

Leaflet—"The Goura Mount."—Mrs. E. Phillips, Vice-President of the Society for the Protection of Birds, has kindly presented for distribution 1,000 copies of the above leaflet. Members desiring copies should at once communicate with the Secretary, enclosing a stamped addressed wrapper.

Additions to Selborne Library.—The Librarian acknowledges with thanks the receipt of the following books from their respective authors: "A Mendip Valley," by Theodore Compton; "Glimpses into Nature's Secrets," "Amidst Nature's Realms," and "The Story of a Piece of Coal," by Edward A. Martin.

Council and Committee Meetings.—The next meetings of the Council will be held on July 2 and August 6, at 5.30; and of the Magazine and Leaflet Committee on July 16 and August 20, at 5.30.

Field Club Saturday Rambles:—

July 4.—Meet at Banstead at 3.19. Walk to Woodmansterne and Coulsdon. After tea by Smitham Bottom to Wallington. Victoria, 2.14 (Thornton Heath, 2.40; change at West Croydon). London Bridge, 2.14 (West Croydon, 2.54; Banstead, 3.19). Take return tickets to Wallington.

July 11.—Leave Chingford Station on arrival of 2.34 train from Liverpool Street; Clapton, 2.45. Thence *via* Obelisk, Hawk and Bury Woods to Sewardstone Green, returning to Chingford *via* Fairmead. Day tickets, Liverpool Street, 1s., Clapton, 8d. Guide, Mr. R. M. Wattson.

July 18.—Leave Cobham Station on arrival of 2.17 train from Waterloo. Through Stoke d'Abernon, thence visiting Blackpond to Oxshott. Day Ticket from Waterloo to Cobham, 1s. 9d. Guide, Miss E. J. Temple.

July 25.—Leave Harrow (Metropolitan) Station at 3.7. (Members are warned not to travel on North Western line as the stations are far apart) Baker Street, 2.40. Thence through Harrow Churchyard, noting Byron's view over surrounding country, through to Ruislip, then to Pinner. Return fare, Baker Street to Harrow, 1s.; excess fare from Pinner about 2d. or 3d. Guide, Mr. T. A. Dymes.

August 3.—Meet at East Croydon at 3. Walk to Ballard's Wood and Addington Hills. London Bridge, 2.25; Victoria, 2.35; Streatham Common, 2.50; Thornton Heath, 2.55. Tea at Sandrock Hotel, Shirley. After tea to Woodside. Take return tickets to East Croydon.

NEWS FROM THE BRANCHES.

Barmouth.—The Hon. Sec. reports an interesting paper by Miss Frances Power Cobbe, read before the Branch on May 28. The paper was entitled "Three Reasons for Humanity to Animals." The sympathy of the audience was frequently and warmly expressed. The Rector of Barmouth occupied the chair. A vote of thanks to Miss Cobbe was passed, on the proposition of Rev. Z. Mather, and seconded by Miss Hearn (Marianne Farningham).

Bath.—The Annual Report for the year 1895-96 is of a very satisfactory nature. The total income was £56 11s. 6d., from which a balance of £19 12s. 9d. was carried forward to the current year. There is a roll of 280 Members and Associates in the Branch. Lectures and rambles have been held throughout the year, the Committee being indebted for assistance in these matters to Rev. H. H. Winwood, Miss Long, Rev. W. S. H. Samler, Mrs. Laxton, Mrs. Knott, and the Hon. Sec., Mrs. Wheatcroft.

In addition to the usual officers there are seventeen district secretaries, a very suitable arrangement in cases of Branches in large towns. The Right Rev. The Lord Bishop of Bath and Wells has been elected, and has kindly consented to accept the office of Patron of the Branch.

EDWARD A. MARTIN, F.G.S.,
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

No. 80. AUGUST, 1896. Vol. VII.

"OSPREYS" IN HIGH PLACES.

UNDER this heading we printed more than two years ago* two protests by valued members of the Selborne Society, against the use of "ospreys" at one of the Queen's Drawing-rooms, and against the example set by the Princess of Wales, whose court train on that occasion was trimmed with them.

Since that time continuous protests have been made in almost every quarter against this cruel fashion, with, alas, but little effect. The last, and from the position of the writer, the most important of these, was from Sir William Flower, Director of the Natural History Museum, in the *Times* of June 25. No one can accuse Sir William of being either a sentimentalist or a "faddist," yet no one could have spoken more plainly than he has done, as his letter, which we here reproduce, will show:—

> You have upon several occasions given some of your valuable space to letters upon the cruelty involved in the fashion of wearing feathers in ladies' hats. Especially has it been pointed out that the lovely, delicate plumes of the small white herons or egrets can only be procured by the destruction of the birds during the season in which they have their nests and young, as then only are these feathers developed. In the trade, for some unknown reason, they are called "osprey," though the real bird of that name, a kind of fishing hawk, produces no ornamental plumes. Notwithstanding all that has been said, the garden-party season now beginning shows that the fashion is as prevalent as ever. I have recently noticed many of the gentlest and most kind-hearted among my lady friends, including some who are members of the Society for the Protection of Birds, and who, I am sure, would never knowingly do any injury to living creature, adorned with these very plumes. Why is this? Simply because, in order to keep up their trade and dispose of their stock, the purveyors of female raiment, to salve the consciences of their customers, have invented and widely propagated a monstrous fiction, and are everywhere selling the real feathers warranted as artificial! Within the last few days I have examined numbers of plumes, the wearers of which were priding themselves on their humanity, relying upon the assurance of the milliner that they were not real egret's feathers but

* Nature Notes, 1894, p. 75

manufactured. In every case it did not take a very close scrutiny to ascertain that they were unquestionably genuine. The only "manufacture" consisted in cutting the plume in two, and fixing the upper and lower half side by side, so that a single feather does duty for two in the "brush." Thus one of the most beautiful of birds is being swept off the face of the earth, under circumstances of peculiar cruelty, to minister to a passing fashion, bolstered up by a glaring falsehood.

This letter was reprinted or commented upon in the principal newspapers, daily and weekly, London and provincial; and almost simultaneously with its publication it was officially announced that the wedding trousseau of Princess Maud included "a going-away toque of burnt straw with full osprey plume." The *Daily Chronicle* of July 3, in a leading article, called attention to this in the following words:

We are sure that Princess Maud is not aware of this—that she has not read the articles in our own columns, nor the letters of Professor [Sir William] Flower in the *Times*. We are perfectly certain that nothing would induce her for a moment knowingly to condone any act of barbarity committed wilfully upon a beautiful and helpless animal. We venture to feel assured, therefore, that when these facts are brought to her knowledge, as we shall take care that they are, she will order these plumes to be immediately removed from her hat, and let it be known that she will never again wear them, thus exerting her great influence upon the eve of her own happiness, on behalf of the welfare of a gentle and beautiful creature.

This article was brought under the notice of the Princess, and the *Chronicle* of July 13 "chortled in its joy" when it announced, on the authority of "an authoritative letter from Marlborough House," that the obnoxious "toque" would not be worn. "We have now very great pleasure in stating," said the *Chronicle*,

that the Princess Maud has no intention whatever of wearing a hat with "osprey" feathers or trimmings on her departure from Marlborough House, and that she will therefore give no countenance to the fashion in question. We need not say that her decision does her very great honour, and, as we said before, this gentle and womanly deed will add greatly to the volume of good wishes which will follow her into her married life.

The critic might, we think, consider that the newspaper had become somewhat hysterical, for after all the decision of the Princess was only that which the *Chronicle* expected and humanity dictated, and therefore, however gratifying, hardly did her "very great honour." But it is not every day that a newspaper can claim to have influenced the decisions of Royalty, so the effusion was pardonable.

But the *Chronicle's* delight was short-lived. Only three days later we read:—

Our astonishment was great, in receiving the official list of the gowns and decorations worn by the ladies of the Royal Family at the Queen's garden party on Tuesday last [July 14], and in finding among them the Princess of Wales "with a full osprey," the Duchess of York in a bonnet "with white flowers and aigrette," the Princesses Victoria and Maud of Wales "with white and black ospreys," the Princess Christian "with a white osprey," and the Duchess of Connaught "with a tall white osprey." The Duchess of Buckingham, the Countess of Cadogan, and the Duchess of Bedford followed the example set by royalty.

Nor was this all; the same paper contains the following letter:—

At the opera last night, I was in the furthest point of the stalls from the royal box. I do not see very well, but I believe that seated next to the Princess of Wales was one of her daughters wearing in her hair a spray of the so-called "osprey" plumes. Unless my eyes deceived me, as I hope they did, this very conspicuous display of these feathers is a curious comment upon the decision of the Princess Maud which you published the other day.

"Hope springs eternal"—and the *Chronicle*—a little shaky in its grammar, probably as a consequence of this practical illustration of the unwisdom of putting trust in princesses—

cannot help but be confident that the most influential ladies in the land will make it clear that the butchery of the egrets will henceforth find no support from them. Nothing would induce us to believe that the Queen herself would hesitate for one moment in forbidding these plumes in her own household, if the above appeal were brought to her notice.

Meanwhile, however, nothing has happened, except that Mrs. Hodgson Burnett has appeared at the Authors' Dinner surmounted by a magnificent osprey. Whether Princess Maud goes away in a toque "with full osprey plume" or not, it would seem she has no intention of abandoning them at home; and the English Court, following suit, will no doubt continue to outrage decency of feeling, in slavish subordination to the dictates of fashion, countenanced as these are by the leading ladies of the land.

Meanwhile, we reprint the verses which "Tompkins"—in whom it is allowable to recognize Mr. Barry Pain—contributes to the *Chronicle*, in what he well calls the "murder hats." We have not reproduced the extraordinary spelling in which the *Chronicle*, following the example of other papers, attempts—and signally fails—to reproduce the London accent.

MURDER HATS.

Do not ask it! Ask for money for a charitable cause,
And the women plank it down as well as men;
Ask for time or ask for labour, and not one of them will pause
But gladly sacrifice herself again.
But there's just one thing exactly as you mustn't ask for—that's
The white plume as is fashionable for decorating hats.
They loves mercy, yes, they do,
They loves pity, it is true,
But they mostly and especially loves their hats;
The passion of their lifetime is their hats.

The young birds is a-starving at the breaking of the day,
And the nest is dead and cold before the night.
The young birds is a-starving, for the parent bird's away—
Shot down because the fashions say it's right.
The crest it wears in pairing-time's the death of it, and that's
Because the Royal Family will have it in their hats.
O they loves all living things
'Cepting anything with wings
As can handily be murdered for their hats,
For their wedding or their garden-party hats.

If a common chap like me should go and over-drive his horse
(Which ain't a thing as I should do with mine),
The S.P.C.A. officer is down on him of course,
And he's lucky with the option of a fine.
And the tender-hearted ladies knows it serves 'em right, though that's
Not half the cruelty as goes to making of them hats.
Up above and down beneath
To Eliza on the Heath,
They'd take a thousand lives to trim their hats,
And ain't they smart and pretty murder-hats !

THE FOREST.

RAMBLES in the forest, where all is so still, and one may walk for hours without hearing a sound, except now and again when the quietude is broken by the rumbling of a cart, the stroke of the woodman's axe, or the bark of the roebuck, lead to much thought and contemplation ; and in this paper I purpose to give, firstly, some account of a German forest and of some of the animals to be met in it, and secondly, to offer some general remarks on forestry as it affects the climate of countries and the well-being of nations.

It was in the middle of July that I went to lodge *en pension* with one of the royal foresters about seventeen miles from Cassel, where these lines were written. The forester's house (in German *Forsthaus*) is a well built structure streaked outside with dark beams, as are seen in the older dwellings in the midland counties of England, and having its range of farm-buildings close by of similar construction, and almost overhung by the trees of the forest.

The royal forest here extends for a distance of some ten miles along the river Weser, and being six miles broad is of a considerable size. It is enclosed by a high paling, which, however, is placed some distance inside the trees, and so is not unsightly ; this serves to confine the red-deer, and prevent the wild boar from ravaging the adjoining potato fields, but is not able to altogether restrain the wanderings of the roe-buck, who are to be seen frequently in the open country. On one occasion I saw three of these last named dash past close by the Forsthaus, chased by a dog who would have fared badly had our host seen him, for he would have been undoubtedly shot. The shooting of the wild pigs and red-deer is generally reserved for royal and official personages and senior officers in the army ; of the former game fifty head are killed annually, and of the latter thirty-five ; roe-buck having a certain growth of horn may be shot, but do not appear to be kept specially for great people.

The forest is chiefly composed of beech and fir trees ; the former are closely planted in some places, in others they have been well thinned out so as to allow the trees to spread their

boughs in their full beauty, whilst there is an undergrowth of the same tree to afford fine shelter for wild animals, and where the great stags lie during the heat of the mid-day sun in summer. Firs seem to be always thickly planted, and afford shelter and warmth in the winter for the pig. The other trees to be met with are principally oak and birch. There are open spaces of considerable extent covered with coarse grass, and many roads traverse the forest, some metalled, the others covered with turf. The same description applies to the forests near Cassel, but these are not enclosed, and the only four-footed game that I have met in them are roe-buck and hares. Of ferns we particularly noticed an abundance of oak fern, and there were besides male fern, lady fern, hard fern, and in a few places bracken.

The weather being very hot whilst we were at the Forsthaus, our walks were generally taken after four o'clock, when we could have three or four hours before supper, and when the wild animals would be out on the feed; we always came across roe-buck and frequently red-deer, and could have shot many of both had we been allowed to do so. The forester, when with us, used to make a whistling sound with a leaf from a beech tree that would attract the roebuck till they came near and could see or scent us, when they would scamper off. But the animals that interested us most were the wild pigs. I had never seen any of these in Europe before, and my little son and I were quite pleased when we saw the first one gallop past us at a distance of only ten yards, clearing the fallen timber that lay in his path like an Irish hunter; we came across three or four afterwards at different times, but they are more shy than the deer. We used to watch them with glasses as they were feeding, and realised what must be the strength of the pig's snout as we daily saw where they had been grubbing up roots, &c., and leaving fresh tracks for miles.

We often stalked the red-deer, seeing how close we could get without being observed. One evening, the forester having won at a shooting match with other foresters the privilege of shooting a stag, my son and I followed him, and after a long walk, during which we had only seen a red doe and her calf, we presently came to a place where several roads met, and treading softly, we saw down one of them three fine stags; they retreated into the woods, and we lay down in the ditch beside another road where it was thought the game would come. Almost directly a splendid stag came out and stood by the side of the road, within fifty yards of us, for fully three minutes; it was twilight, and we watched whilst the Forester, who was some paces in front of us, viewed the deer through his glasses. We could not make out why he did not fire when he had the rifle to his shoulder, but learnt afterwards that he was only allowed to shoot a stag with six or eight points to his horns, whereas this one had ten or twelve.

A night or two after this the forester, when my son and

daughter were with him, shot a young stag with horns just beginning to sprout, a pretty fellow, with such graceful limbs that one almost felt sorry he had been killed; however, of course, these animals must be kept down to a certain number, and their flesh is good wholesome food. The dead deer was left in the forest all night, a white pocket-handkerchief having been spread out over him to scare away the wild pigs, who otherwise would have eaten him, we were told, and brought home next morning.

I took a walk across the same forest in November, at which time the deer are about all day, and saw several within easy range, but not having a rifle I could only say with Jacques. "Sweep on, you fat and greasy citizens," and continue my journey. On arrival at the Forsthaus late in the evening a hearty welcome greeted me, the barking of the dogs soon turned to joyful play, and presently we were discussing the familiar venison at supper.

In these days, when a certain class of politicians agitate for the entire abolition of game laws, it is interesting to note that in Prussia the following game have their close season: elk (of these only a few remain in Eastern Prussia), red- and fallow-deer, roe-buck, pig, badger, cock of the wood, moor-hen, pheasant, duck, bustard, snipe, wild swan, heron, partridge, black game, quail, hare. In the other States of Germany much the same list exists, but the close times vary somewhat for the different species. Without restrictive laws the forests of Switzerland, be it noted also, contain nowadays almost no animals.

The science of forestry is one of comparatively modern growth. In the olden days, when there was plenty of wood for fuel, building and other uses, and sufficient pasture for all, it was unknown; but as time went on, in about the fifteenth or sixteenth century, with the increase of population, demands for land and claims on the forest, a fear of wood famine began to be felt in Europe. In the year 1700 this fear became universal throughout middle, west and south Germany, and it is recorded that large tracts of forest were, through imprudent cutting, depasturing and other means, rendered desolate and unfruitful. Man then began to see that for the trees of the forest, as with the crops of the field, there must be a seed-time, a planting time, a time for thinning out, and a harvest season, or all must eventually disappear.

Passing on to the present day, we find that more than a quarter, some 27 or 28 per cent. of all Europe, is covered with trees; in Germany the percentage is over 25½, and in Prussia nearly 23½ per cent. of the land is forest. The control and management of such an extent of wooded land in a well-ordered State, such as Prussia essentially is, constitutes an important part of the national economy, and here we find there are four classes of forest, of which the royal forests occupy about 30

per cent., those held by corporations 12, those belonging to private individuals 53, and the remaining 5 per cent. is held to charitable uses.

There is quite an army of foresters in Germany, about twelve thousand in all, with upper foresters and higher officers above them; those of them who belong to the State are, in Prussia, under the Minister for Husbandry, Crown Lands and Forests. Throughout Germany there are various institutions for the training of these officials, who, in addition to preserving game, must have a competent knowledge of forestry, so as to be qualified to superintend the cutting down and planting of trees, the making of roads and other matters necessary to the maintenance and profitable working of the woods. The two forest academies for Prussia are situated, one at Eberswalde near Berlin, and the second at Münden, not far from Cassel. The curriculum of studies include forest economy, botany, zoology, mathematics and geometry, natural history, forest law, road-making and physics.

Foresters are to be seen everywhere, and are a fine lot of men. Those in the public service wear a uniform of light olive green, with buttons impressed with the royal eagle, and each has his portion of the forest under his charge. His house belongs to the State; and so do the seventy or eighty acres of land that our forester farms. The rougher gamekeepers' work, he told me, he had little to do with, as poaching is little known in his neighbourhood. This, however, is by no means universal, and I am informed that more than thirty foresters are shot each year in Germany by poachers; particularly when harvest folk are about must the foresters be on the look out. On the sides of the German hills one sees practical forestry in operation, with large portions of the forest cut down as the trees come to maturity, and those tracts then replanted.

Forests, then, are well cared for in Germany, and peasants are now prohibited from gathering leaves to use as fodder, as their doing so impoverished the woodlands, depriving them of their natural manure. I had good evidence of this law at Easter one year when taking a walk in the Thuringian forest, near Eisenach, where, in a gully, I waded almost waist deep in dead beech leaves. In Switzerland, where the forests belong principally, if not entirely, to the people, they are managed with great care by communal and district councils; and once when picking wild strawberries in a young plantation above Clarens I was warned by a countryman that if caught I should surely be fined or sent to prison for damaging the young fir trees. There is a forest academy at Zurich.

The importance of forestry is well understood also in Austria and France—and I believe in India, where I hope it is systematically practised. There was, when this article was written in 1892, a young Englishman destined for the forest department in the last-named country, studying at the academy

at Münden; but, as a rule, I believe English students are sent to France for a course of training there.

In England the subject is little studied; there the proportion of forest land is small—only 4 per cent. All of it, with a few important exceptions, belongs to private individuals, and the royal forests are managed by a department of the central government. In the British Islands it is of comparatively little importance, with their moist climate; almost any pranks can be played in the way of cutting down trees without doing serious damage. Indeed, in England, in many places there are far too many trees in the hedge-rows, which damage one another and the grass and crops beneath them. How good a thing it would be if the surplus could be cut down and burnt as fuel in London instead of coal, and so mitigate the yellow-fog nuisance! I would, however, call attention to what our President, Sir John Lubbock, says about the New Forest (see NATURE NOTES, 1894, p. 133).

The United States of America have learnt a bad lesson from us in the matter of forestry. An article in the *Cosmopolitan* for July, 1892, shows clearly how sadly the teachings of this science have been neglected. The experience of a not very large island will not avail in a vast continent, and the writer shows how a sandy district, when once denuded of trees, becomes a spreading sore in the land; the sand driven by the wind burying adjacent forests, so that the tops of the trees only are visible, and threatening destruction to towns and villages. In England at times there has been clamour to bring every square yard of land under tillage; and no doubt the same cry will be raised by ignorant people in other lands. But nature may not be defied with impunity; and I trust the Americans will take due warning. For them to destroy their forests is as suicidal as for a man to live on his capital—a day of reckoning must come. It is satisfactory to know that a commission has been appointed in America to collect evidence and report on this.

Greece neglects forestry, I hear. But now let us turn to Russia. There I understand there is no thorough system of re-planting, factories are established and remain *in situ* so long as there is wood to burn in the furnaces; they then are moved on. This continues, so that vast tracts of land have become bare of trees, the land, having no shelter from the sun's rays, burns up, and great navigable rivers have run dry. The mischief is so serious that German statesmen apprehend that the climate of their own country will suffer. But the matter goes further than this; with the interior of Russia becoming a waste, the population must move somewhere, and this will be an excuse for the Muscovite bear extending his arms, according to traditional policy, around the shores of the Black Sea. I am glad, however, to find that in Russian Turkestan at last people are beginning to waken in this matter, and re-planting has commenced.

This much should show of what importance the science of

forestry must be to all thoughtful persons; and it does seem strange that in the nineteenth century there should be nations who blind their eyes to the fact that if they allow their mountains to be deprived of their clothing of trees, then the rain, as it descends upon them, will speedily run off to flood the lower lands, and the moisture, not being retained in the mountains, to be given off gradually, as designed by nature, drought must follow. Here is the cause of Russian famine.

Sir John Lubbock says in one of his charming books that the reckless cutting down of forests is the cause of the downfall of nations. This is very true—witness the decayed power of Syria, of Greece, of Spain. Look particularly at Spain, the most recent example we have, with her hills denuded of their natural covering, her dried-up streams, her pulverized ground, destroyed climate, ruined agriculture, and destruction of the sources of national wealth and contentment. What a power she was, and what a power she may again become, with her fine frontier, if she will only replant her forests! The question is sometimes asked: "Will the newly-created German power last?" The answer can be at once given: "Certainly; she replants and maintains her forests, the national stability rests upon a sure foundation—the preservation of agriculture."

There is much more to be said upon this most interesting subject, but of that, perhaps, another day—this article is already too long. Meanwhile, let us hope that a greater interest in it will be taken in some high places, and forestry be introduced where needed. The people of the United States, and some of our nearer neighbours, should look well to this matter; and it should be well borne in mind in our colonies. It is worthy the attention of great men, and more to be thought of than protective duties, tariff wars, international exhibitions, and passing political questions. The nation that heedlessly cuts down its forests does not develop, but destroys its resources. What criminal folly, what selfish indifference to enduring interests and the rightful claims of posterity!

The forester's important work is not that of a day or a year, it is for those that come after (trees do not mature so as to be fit to cut down for timber till they are from sixty to one hundred and twenty years old, speaking generally). At the same time his life and occupations are, indeed, pleasant, and the following German proverb will fitly conclude this article, "Den Wald zu pflegen, bringt allen Segen," which may be rendered thus—"To tend the wood brings every good."

Slapton, Kingsbridge. GILES A. DAUBENY.

THE SEAL BUTCHERY.

THE following letter from the *Saturday Review* of July 11 is another evidence of the interest that our leading journals manifest in that crusade against the wanton and cruel destruction of life carried on at the dictates of fashion, to which the Selborne Society and its magazine have always lent their support.—ED. N.N.

The question of the seal fisheries is an old one, and one which seems not unlikely to settle itself eventually by the extinction of the species. The horrors of the trade are shown in the following extract from an article in the *Century Magazine*, by C. E. Borchgrevine :—

"The seals are killed either with guns or pikes. There is very little sport attached to seal-hunting, especially in Antarctic waters, as the seals there are tame through ignorance of man's bloodthirstiness. Generally they were asleep when we approached, and many of them died without seeing their murderers. But, as a rule, the slaughter and skinning of the seal were most barbarous, bloody, and hideous—unnecessarily so. Specially cruel is the task when seal-pikes are used. Only rarely does a seal die from one or two blows of the pike, and if it is not dead it is generally considered 'all the better,' for it is easier to skin a seal while it is half-alive. In the utmost agony, the wretched 'beast' draws its muscles away from the sharp steel which tears away its skin, and thus assists in parting with its own coat."

Is not this sufficiently horrible for anything? There are practical remedies, which I think might be soon applied, if people would sufficiently emphasize and impress the terrible truth that seal-fishing as it is now carried out is wholly unnecessary. Now I have little hope that seal-skin wearing will soon be disearded, however strenuously the really humane public may protest. We see every day that the craze of feather-wearing is as shame-faced [? shameless] as ever, despite all that has been said and written against it for years. So devout are the worshippers at the shrine of the Goddess of Fashion that, heedless of the blood and hideous barbarity which frequently has to be waded through by the men and women who are in her merciless meshes, they needs must ever deck themselves as she decrees, savage and brutal as that decree may be. But the powers at least might combine to give the seals protection from wantonness in their slaughter, in that the fishermen who go out to the "rookeries" should be specially instructed to deal with the creatures considerately and with some appreciable degree of humanity. Government inspection would, I think, be able to secure this.

That the seals are also threatened with total extermination is a further reason for some enactment of protection. The result of the Behring Sea arbitration and of the treaty made between this country and America, which we trusted might result in the affording of some sort of protection to the seals, has been a great disappointment. President Cleveland, in his late message, refers to the subject, admitting that the hoped-for benefit to the seals had not been attained. In some quarters I see no prospect is recognised of any better protection for the unfortunate creatures. A new commission, to consist of representatives from Japan, Russia, the United States, and Great Britain, is now proposed, to consider the seal question with a view to preventing the threatened utter extinction of the species, though solely from commercial reasons. But it is just the matter of commerce that inspires hope. An extension of the close season, beginning by including May, and embracing August and, if possible, September, would secure the protection of the mother seals until the offspring were able to care for themselves. This does not appear to be impracticable, yet we have been told that everything practicable has been tried. Another regulation which would be found to work with considerable advantage to the seals would be the prohibition of the spear as an instrument of killing, and the substitution of the gun in its stead. At present the shooting of the seals is prohibited. "Almost all the seals killed in the Behring Sea," says a recent writer, "are females seeking food while their

young are left on the islands, and they are taken when asleep in the water. The requirement that they shall be killed with spears and not guns permits the destruction to go on so quietly that the animals near those killed are not disturbed; whereas it is urged that if guns were used the report would awaken them and many more would escape than under the present system. It is, therefore, desired to secure a reversal of the regulation made by the Paris tribunal, which all along has worked in the opposite direction from the one intended. The reversal would permit the use of guns and prohibit any great use of spears, if any. These proposed regulations constitute a practical remedy which might soon be in operation if the nations concerned could agree.

JOSEPH COLLINSON.

THE GROWTH OF A LEAF-BUD.

THE Leatherwood is one of the handsomest of our mountain forest trees: it belongs to the Saxifrageæ, and is called, in scientific parlance, *Eucryphia Billardieri*. Although it has not the elegant tapering form of the sassafras (*Atherosperma moschata*), nor the bright glossy leaf which renders that tree so conspicuous, yet its glaucous foliage is not without a certain charm, and forms an effective background to the large white blossoms with which, in early summer, these trees are literally covered. To see them about November or December, which is the beginning of our fine weather in the mountains, dotted about the hill-sides among the sombre, dark green "myrtles" (*Fagus Cunninghami*), forming columns of white, seventy or eighty feet high, the foliage being scarcely visible, is one of those nature-pictures which dwell for ever in the memory.

The glaucous character of the foliage is partly brought about by the dull, one might almost call it neutral, tint of the leaves, partly by the thin layer of gum peculiar to the Leatherwood, with which each leaf is covered on the upper surface. This gum is a provision for keeping out the cold rain and frost and snow which prevail in these regions for a great part of the year. Every leaf-bud is covered with a knob of it, which keeps all snug below until the increasing warmth of the season softens it, and enables the young leaves to push through. Then begins a struggle; the pair of leaves is still held tightly together by the mucilage, each leaf being still rolled up, and, as the impulse to push out and grow comes to them in the sap, they try hard to pull themselves free and unroll. That this is a work of time, and that the gum holds tenaciously until the weather is warm enough to allow the tender young leaves to be exposed without danger, the following brief notes will show. The accompanying rough outlines serve to illustrate the pushing of the rolled-up leaves through the knob of gum, and the gradual pulling apart as the warmth of the sun softens the adhesive substance which binds them.

It may be mentioned here that the Leatherwood gum is a clear yellow in colour, has a very aromatic odour, especially when warmed, and possesses valuable antiseptic properties. The Bischoff people apply it to cuts and burns, which heal quickly under this treatment, and it is said that some medical men in these colonies use it in their ointments, which may well be the case.

Nov. 16 (this is the beginning of summer).—Observed bud at end of twig; just a round knot of yellow gum (fig. 1).

Nov. 23.—The bud has now shot out to about the length of a quarter of an inch, pointed, still covered with gum (fig. 2).

Nov. 30.—Now about half an inch in length: most of the gum has disappeared: colour yellowish, with small reddish streaks and red tip (fig. 3).

Dec. 6.—The two rolled-up leaves, which emerged together from the bud, have now separated at the tips, but are still held together for about three-quarters of their length by the gum with which they were originally covered; one leaf is longer than the other (fig. 4).

Dec. 14.—The two leaves, still rolled, are held together yet at the lower part (fig. 5).

Dec. 21.—Considerable growth, but still rolled, and held together near the base (fig. 6).

Dec. 28.—The two leaves are now separate, the gum having ceased to hold them, and have begun to unroll at the outside, which is the back of the leaf; one is unrolling at the base, the other both at base and apex (fig. 7).

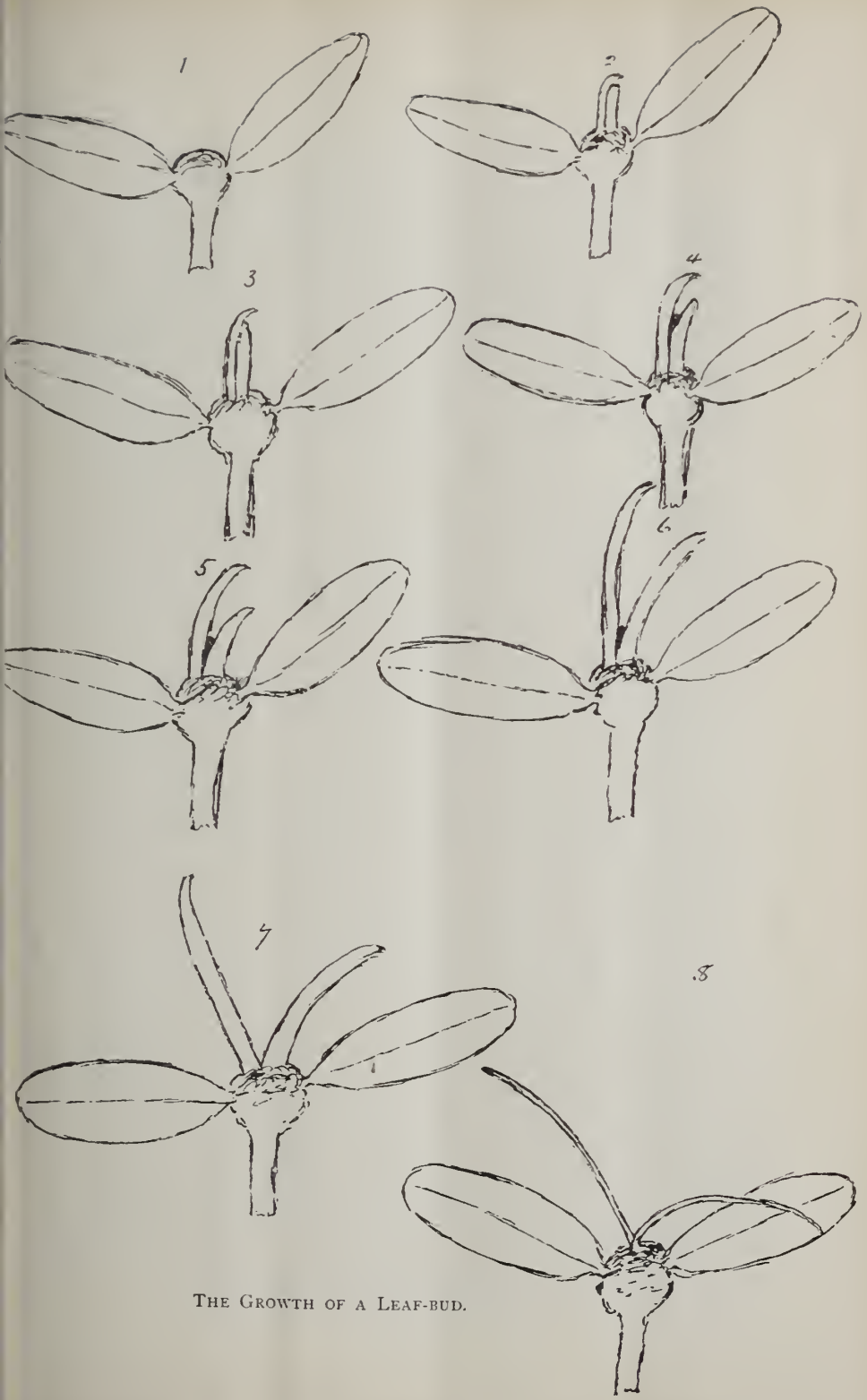
Jan. 2.—Both leaves are now quite unrolled, and the stem on which they are growing has protruded slightly from the cup-like socket which represents what was the lower part of the bud (fig. 8).

H. Stuart Dove.

Table Cape, Tasmania.

Young Cuckoo in Richmond Park.—The other evening I was a witness to that most impressive sight, which, when once seen, is never forgotten—the feeding of a young cuckoo by its foster-mother. Happening to stroll, just after sunset, on the outskirts of a "plantation" in Richmond Park, I saw a large grey bird, in company with a much smaller one, alight lazily on an adjacent birch tree and begin "kissing." Prompted by curiosity I crept nearer, when I found them to be a young cuckoo with its foster-mother—in this case the familiar little flycatcher. Screening myself behind some bracken, I watched them. The fly-catcher would every now and then dart off for a short distance, returning with some insect with which she would feed her charge, who would open its mouth as though it were about to swallow its mother as well. This was repeated time after time, till, it getting dark, I began to move off, and they then flew into the denser part of the wood. It was almost humorous, the difference in the size of the little bread-winner and her lazy charge; yet touchingly pathetic in the anxious and assiduous attention of the little bird.

B. H. Jones.



THE GROWTH OF A LEAF-BUD.

WAYSIDE AND WOODLAND BLOSSOMS.

It is just a year since we printed * a notice of the handy little volume issued by Mr. Edward Step under the above title; and we now have before us a second series,† which the favourable reception of the first has induced the author to publish. We think he has done wisely in continuing his work, for the new volume possesses all the good points which we pointed out in our notice of the first series.

We cannot, however, say that we observe in this new volume any improvement upon its predecessor. Certain incongruities, *e.g.*, the introduction of foreign trees and of ferns in a work supposed to be limited to "British Wild Flowers," upon which we commented, in our former notice, are repeated in the present book; and the time-honoured criticism, "the author would have done better if he had taken more pains" must be held to apply. He would then have avoided such awkward phrases as "What the wild roses and the brambles are to the 'splitter' and species-monger, so, in a minor degree, are the aquatic species of Ranunculus." We doubt whether he would have been content with his figure of *Ranunculus trichophyllus* as a representation of that species, whose name, by the way, he twice mis-spells. Mr. Step would, we think, do well to leave critical plants out of his consideration, for it is clear he is not *au courant* with recent work upon them; the student of brambles would smile at the advice, "should any of our readers wish to become bramble specialists, we do not think they will find a better guide than Mr. Baker's arrangement,"—*i.e.*, that in the *Student's Flora*, where he "reduces these to four species." Scientific botanists are not likely to need guidance from Mr. Step, but, if he finds it necessary to allude to critical plants, it is desirable he should direct his readers to the best sources of information concerning them.

As before, the observations bearing upon fertilisation are carefully summarized from good authorities, and in matters of this kind Mr. Step is usually an infinitely safer guide than Mr. Grant Allen, although the latter has a more attractive style. But an absence of imagination has certain drawbacks. Mr. Step quotes—or rather misquotes—Gray's well-known lines about the flowers "born to blush unseen," and proceeds to moralize upon them in a manner worthy of the traditional Scotchman. "Were he now living, Gray would almost certainly re-write or expunge these lines, for it is now clear that the tastes of the nectar-seeking, pollen-carrying insects have had greater weight in the evolution of the flower than had man's æsthetic sense. Further, the fragrance of the desert flower we now know to be *prima facie* evidence that insects also exist in the desert; and, should the appropriate insect come to the flower and taste of its nectar, we know that the fragrance has not been wasted, though no human foot ever passed that way"; and so on.

Mr. Step is not proof against the temptation to invent explanations of popular names, and even, as we showed in our former notice, to dogmatize concerning them. But he should at least consult some standard work before writing such nonsense as this about Ploughman's Spikenard: "As [true spikenard] had to be imported from India it was expensive to buy, therefore ploughmen and other poor persons had to be content with the costless substitute, *Inula Conyza*. Hence the folk-name for this common biennial." This suggestion would throw a new light upon the habits of ploughmen, but, unfortunately, the name is an invention of Gerard's, and has no claim to be considered a "folk-name." Still more alarming is the insinuation that *Atropa Belladonna* used to be grown in gardens "for use in that branch of 'domestic medicine' which concerned itself with the mixing of potions to quiet troublesome friends." They did queer things in the Middle Ages, no doubt; but we hardly think this notion of keeping poison constantly at hand for the benefit of "friends" was generally entertained by them.

Many of the coloured figures are good, and most are passable, though here and there we find one, such as that of the furze, which is in no way satisfactory. It would be well to introduce details of floral structure, which could easily be done without interfering with the figures as they now stand.

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* Nature Notes, 1895, p. 131.

† F. Warne & Co., price 7s. 6d.

SELBORNIANA.

Our Society (p. 155). A discussion on the subject of Selbornian work abroad, such as Mr. Daubeny suggests, would be of great interest. For discussion on a given subject, unfortunately, our annual meeting provides but little opportunity. Possibly a large number of those who attend would prefer the speech-making still further curtailed. Speaking personally, I think a meeting of the whole Society once a quarter, purely for the discussion of Selbornian subjects, would be extremely useful and profitable, if only members would attend in sufficient numbers to warrant the expense. So far as present experience goes, several meetings have been most scantily attended. I feel thoroughly sympathetic with Mr. Daubeny in the high ideal he has formed for the Society, and much of what he suggests could be carried out if only members would take an individual part in pressing forward the interests of the Society by obtaining new members, and by this means increasing its income. The sinews of war must be provided before war can be carried on.

In regard to similar work abroad there is a society in Switzerland for the protection of plants. Anticipating our "bird sanctuaries," the Canadians have set aside an area containing 1,300 square miles of land and 166 square miles of water, near Lake Nipissing, for the protection and natural increase of birds and animals—a truly Selbornian work. It was announced a short time ago that the Germans were doing a similar thing in the Cameroons, and, perhaps, the Selbornian Society would be doing a good work if it were to endeavour to influence the Rhodesians to spare a tract in their country and place it under protection before any great harm were done to the fauna and flora of the country.

E. A. Martin.

The Preservation of Fortune Green.—About a mile or so to the west of Hampstead Heath lies a small green, on the lower slope of where the Northern Heights sink down into the great western plain of the county of Middlesex. Barely two acres in extent, bordered on three sides by shops and artisans' dwellings, and on the other by the Parish Cemetery, Fortune Green has itself little of the picturesque save two elm trees up in one corner, which alone cast any grateful shade on a hot summer's day. There are numbers of London squares that possess far more intrinsic beauty than this little plot of open space. That otherwise exhaustive store of local history, the *Records of Hampstead*, can throw but little light on its origin, nor is there any statement or conjecture in that volume as to how it came by its curious name. But certain it is that for a long time past a ceaseless struggle has been carried on to preserve it from being built over, that has till lately met with but meagre success. If any wonder at the strenuous endeavours of local inhabitants to maintain the green in its present condition, let them visit the neighbourhood. They will find plenty of old gardens, groves and park land left, but on this western side of the great parish of St. John, Hampstead, far away from the glorious stretch of the Heath and Parliament Hill Fields, there is an absolute dearth of common land. The value of the ground, already enormous, increases yearly; to say the least, money invested in it is a far safer speculation than many a West Australian or South African gold mine. For some reason, possibly on account of the distance from Hampstead Heath, the whole area seems likely to be covered with small suburban villas, of the usual hideous type—yellow brick, slate roofs, and bay windows, and badly built withal, to judge by similar productions in the district, that came under the writer's personal observation while being constructed, some years ago. It seems hard to believe that the very large sum of £8,000 is required by the owner, the lord of the manor, before this trifling area can be made public property. But its preservation will undoubtedly prevent the neighbourhood from becoming a network of sordid and gloomy little streets, and we cannot but congratulate the Hampstead Vestry in their public-spirited determination to vote £3,000 towards its purchase. It is earnestly to be hoped that other public enterprise, and private as well, will combine to preserve intact what has been a humble, but none the less real, recreation ground as long as the oldest inhabitants of the parish can remember.

Archibald Clarke.

Paper again!—I have been staying at Hadley Wood, near Barnet, where there is a beautiful old wood, the remains of a Royal Chase. It is the resort of hundreds of people, specially on Saturdays and Sundays. I went in one Sunday morning in June, and was shocked to find it strewn with literally hundreds of dirty papers—the remains, I suppose, of the Saturday visitors. Can nothing be done through bye-laws, or other means (such as notices on boards outside) to stop this vulgarization of a quiet and beautiful place? If eating should be necessary for the enjoyment of scenery, the papers might be taken back by those who brought them.

Woolton, Liverpool. E. GASKELL.

Our Badge.—It may at first, perhaps, seem to be a trifling matter, but possibly it may not have occurred to some of our members that a very convenient way to wear the badge is, after removing the pin, to bore a hole in it, and by means of a split ring attach it to the watch chain. It is in this way that I wear mine, and I do so at all times, and I think it were well if all Selbornians as far as possible, always wore the badge. By doing this they would proclaim to the world the existence of our Society, and when friends noticed our emblem, we could tell them of our objects and our work. Perhaps our Secretary will kindly consider the advisability of keeping in stock, badges so pierced, which could be sold cheaper than at present, possibly at a shilling. We want to extend our operations to the utmost, and this seems to be a very sure way to help towards realizing our wishes.

Slapton, Kingsbridge. GILES A. DAUBENY.

NATURAL HISTORY NOTES AND QUERIES.

Nightjar and Chiffchaff.—Can any Selbornian tell me whether the Nightjar is ever known to make its churring noise by day, or at any other time than between 7 and 10 p.m.? Also whether the chiffchaff has any other note than its two well-known characteristic ones?

Malvern. F. R.

Flycatchers.—Having been told that birds never have a second brood in the *same nest*, I was interested this year in seeing an instance of the contrary at a friend's house in the neighbourhood. A pair of flycatchers built a nest on an ivy-covered corner of a window-sill where they could easily be seen through the window, and very interesting it was to watch them. The mother bird used to catch flies as she sat on the nest, and later on the little ones did the same. In due course they were fledged, and the very same day the mother laid another egg in the *same nest*, and has brought up another brood of three which were hatched on July 9. Is this an exceptional instance of birds using the same nest, or is it peculiar to flycatchers?

Malvern. F. R.

Rooks at Lyme Regis.—I was much interested in your correspondent's account of rooks at Lyme Regis. I was there myself a few weeks ago, and observed the same thing. On remarking on the novel sight of rooks solemnly marching about on the little Parade, only a few yards from the windows, our landlady said they had begun feeding them in the hard winter (January, 1895) when the seagulls came up to the doors too; they left off coming when the weather changed, but the rooks had gone on ever since. It was funny to see the rooks venturing down a stone groin as far as it was uncovered by the sea, for as your correspondent remarks they seem averse to wetting their feet, and rather enviously eyeing the gulls, who swam gaily about and secured any floating scraps; but apparently they had no objection to damp toes, as they joined the gulls in raking in the heaps of damp newly cast up seaweed (when, indeed, they had the advantage over them), and at low water spring tides, when a certain reef of seaweed rocks was uncovered, they were constantly to be seen stalking about and having a regular good scavenging among the crannies and holes. It was amusing, too, seeing the young rooks brought to enjoy the crusts under the windows. A fine well-grown bird, with deep bass voice, would solemnly

walk up to one of the old ones uttering an impatient squeak and opening a perfect cavern of a beak, in which the parent would deposit some tit-bit. On one occasion, I saw a gull swoop down on a rook, one of the young ones I think, till he dropped the morsel he was carrying off, to the gull's advantage.

Perhaps your correspondent could tell me if she noticed stonechats or whinchats among the many birds that were to be seen at Lyme. There was a pretty little fellow I constantly saw, with bright russet breast, white choker and black cap, a curious jerky flight, much flirting of his tail, and a voice like rattling small gravel in a pill box. I do not know the chats well enough to identify them.

Bath. A. PEDDER.

Elephants.—One day, when my brother and I were at the Zoological Gardens, we went to feed the elephants with a bag of biscuits. We were amused by the way they stretched out their trunks through the bars of the cage to take the food, then curled them up to put it in their mouths. We had fed them all but one, when I dropped the bag inside the outer rail. What could we do now? Neither we nor the elephants could reach the bag. It still contained enough to feed the last elephant, who was eagerly watching us. Suddenly the animal's eyes brightened with an idea, and, putting his trunk down on a level with the bag of biscuits, he blew it towards us, then stretched out his trunk to receive the food. Was not he intelligent to know that he could not be fed unless the biscuits were restored?

FRIDA.

A Strange Nesting-Place.—A wren has selected a strange place for its nest, under a galvanized iron roof, in which some boat sails have been hung. It has placed it in a fold of the sail and has not been disturbed at present. The bird does not seem to mind people looking constantly at the nest. Although the garden offers some excellent places for wrens' nests, such as trees encircled with ivy, it has chosen the sail in preference to them.

Derby. ARTHUR MYERS.

Birds in St. James's Park.—It is interesting to note that the Lesser Grebe is having another successful hatching season in St. James's Park this spring. On May 24 I watched a pair with a brood of four youngsters, about two weeks old, on the water near Duck Island. I say "on the water," but that, properly speaking, ought only to apply to the juveniles; the old birds spending the greater portion of their time under the water, only staying on the surface just long enough to push a small fish down the throat of the nearest of their offspring. Mr. Riley, who has charge of all the water-fowl in the Park, told me that there was also a brood, only a few days old, doing well, and that second broods might be expected later on, until, at the end of the season, there would be, perhaps, as many as twenty of these interesting little birds on the lake. But although there appears to be plenty of room, and, undoubtedly, a good supply of food for all, in the shape of small fish, only three, or, at the most, four pairs will return in the following spring to breed. Sometimes an odd bird or two will pay a pop visit to the Park between times, but, roughly speaking, they may be said to seek pastures new towards the end of the autumn, until the nesting-time draws near again. Once during this spring I saw a fine male, in full colour, on the Battersea Park lake, but I feel sure that they do not breed there as yet; although the conditions are practically the same as in St. James's, and they would probably receive the same protection. The two pairs of pinioned herring gulls in the latter Park regularly nest and rear young, and by the end of May, this year, both hens had been sitting for some time, each on three eggs, in a small enclosure where they are confined, during the duck-breeding season, for obvious reasons. Afterwards they and their young will have the run of the whole place, but not until there are no eggs or ducklings to tempt them from the paths of virtue. The tame black-headed gulls have, with one exception, been destroyed by cats, and the wild ones, so numerous in the hard weather, have, to my great disappointment, all departed to their regular breeding haunts. I still have hopes that in the future one or two pairs of these graceful birds, who so regularly spend their winters in London, will stay behind to nest, and become the progenitors of a race of gulls as

tame as our London wood pigeons. It is pleasing to note how fearless all the wild birds are on Duck Island from long-continued kindness on the part of those connected with the Park. There is one thrush in particular that thinks nothing of hopping into Mr. Riley's kitchen at any time of the day, all through the year, knowing quite well that there is sure to be some tit-bit handy for his special delectation. The ringdove, song-thrush, blackbird, hedge and house sparrows, spotted fly-catcher, dabchick, and moor-hen—all genuine wild birds—nest within a few yards of the cottage; besides, of course, the majority of the introduced water-fowl, comprising many species. Recently the cormorants, an acquisition from the Farne Islands, have nested again, and it is to be hoped will be more successful this year than on previous occasions, when young were hatched only to die from some mysterious cause shortly afterwards. Some of our British sea-fowl appear to be difficult to keep for any length of time away from the salt water. With the cormorants from the Farnes came some guillemots and a puffin; but although every possible care was taken of them, and living fish were regularly turned into a pool for the birds to catch for themselves, they did not thrive, and finally, refusing all food, pined away and died. There used to be a heron in the Park, which was the cause of much anxiety on the part of the duck-keeper, from its predilection for young moor-hens and such like; but one morning it was found frightfully injured, evidently from some ruffian having hurled a stone at it, and for pity's sake it had to he put out of its misery. Incredible though it appears, this is the common fate of most of the long-legged birds that have been in the Park, so Mr. Riley informed me. One fine magpie is still to be seen about the island, and I, for one, should be sorry to miss it; but not so Mr. Riley, who has seen it some five or six times already this season with an egg in its beak, to say nothing of the many probable occasions when its pilferings escaped notice. Altogether I think those responsible for St. James's Park are much to be congratulated on the success attending their efforts to increase the number of London birds.

12, *Fentiman Road, S.W.* W. NAUNTON RUSHEN.

Since writing the above, the cormorants have hatched out one youngster from a clutch of four eggs, which has, up till now (July 22), been doing well, and will probably be successfully reared. This is not the first time that such an interesting event has happened—one of the four cormorants now in the Park being the offspring of the original stock brought from the Farnes about eight years ago. Usually, however, the young die at an early age, from various causes, the first brood of this year succumbing to the cold, and, strange though it seems, there is a danger of the young falling into the water and drowning unless help quickly arrives. The herring gulls are admirable parents, and their respective clutches of three eggs have developed into half a dozen strong young gulls. The old birds will not breed again this season. W. N. R.

Bulbuls.—Mrs. Brightwen says (p. 147) that "she has never before heard of a bulbul kept in captivity in this country." I am glad to be able to say that I have two of this species, answering in all points to her description of "The Egyptian Pet," save that the body is more brown than grey. Mine are natives of the Lebanon, and are charming pets, one especially so. When I open his cage he flies to me, perches on my shoulder, and, if I am at any meal, comes down to myhand and finds his way to my mouth. He eats almost everything, and, when I give him some lettuce or a strawberry, rewards me by a clear and pleasant whistle. I should not say that he has not a very pleasant voice, for I often hear him warbling to himself, and his song at times is most joyous. All my friends delight in his exceeding tameness and familiarity. The other bird is of a shyer nature, although tame. The birds are both males, so there is no hope of their nesting. But some four years ago I had two birds, a male and female, and they built a nest in a hanging flower-pot in my conservatory at Cheltenham, and twice the hen laid two eggs, and hatched two young ones, which died, alas! after a few days, from what cause I cannot say. I found the dead nestlings, once lying in an empty cage, the door of which was open; and, at another time, laid on the floor close to the entrance to the conservatory. How the parent birds carried them from the nest to their several resting-places I cannot say. It is strange that while so many foreign birds are kept in cages and aviaries, the bulbul is seldom or never made a domestic pet, for he is a delightful creature, and would reward any

amount of care. I have never seen one of this kind with the primrose feathers beneath the tail, even in the Zoological Gardens, though I have seen there a specimen of the red-chested bulbul.

Loughrigg Brow, Ambleside. CHARLES D. BELL.

A Winter Cuckoo.—In reply to F. M. Millard's question about the poisoning of young birds by their parents, if unable to set them free, I must acknowledge the birds were not "medically examined," but circumstantial evidence was so strong in three separate cases of our own knowledge that there seemed no room for doubt. A nest of young bullfinches was put in a cage, and hung in the daytime outside the schoolroom window, often indeed on the table inside, and the parents came and fed them assiduously until they were almost ready to fly, when the gardener told us we ought to shut the old birds out now the young ones were so far advanced, as they would be sure to poison them if they could not set them free. This advice we only laughed at, and considered it a bit of Shropshire superstition, but true enough the whole lot of sweet fluffy little bullies were all found dead in the nest one evening soon after. We tried another nest from the same bush next year, and intended to shut out the parents in good time, but they were too quick for us, and that nest-full also died, though they were strong healthy young birds, quite well an hour before. We have since reared five nests without disaster, by removing the cage in time. Another case was a nest of young thrushes which was hung in a tree in the garden, and they also died suddenly when just ready to fly; and the third was also a nest of thrushes, kept by a friend, who says that the poison leaf was found in their mouths, but she did not know what leaf it was, unfortunately. I find the opinion as to poisoning in confinement is a pretty general one in our part of Shropshire.

E. CORBET.

TO CORRESPONDENTS.

A number of communications, book-notices, &c., are unavoidably held over from want of space.

E. A. M.—Two of the paragraphs you send have already appeared in the *Gipsy Journal*. Want of space and other considerations render it impossible to print matter which has been published elsewhere, unless this should be of exceptional interest or importance.

Strathmore.—French honeysuckle (*Galega officinalis*).

F. B. P.—*Bunias orientale.*

C. R.—Such variations are not uncommon.

R. T.—The eggs are those of the buff-tip moth (*Pygæra bucephala*).

E. M. H.—The specimen was very insufficient, but appears to be *Verbascum nigrum.*

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1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Selborne Library.—The Librarian wishes to call the attention of members to the newly-formed library in connection with the Selborne Society. Several authors, who are also members of the Society, have kindly presented copies of their works towards its enlargement, and the Librarian would be very glad if others would follow this excellent example. She particularly desires to obtain the works of Sir John Lubbock, Richard Jefferies, and "A Son of the Marshes," but she will welcome any works of natural history or Selbornian tendency that may be generously contributed by Selbornians.

Leaflet.—"**The Goura Mount,**" by A. Patterson. Honorary Secretaries of Branches desiring copies of this leaflet for distribution should communicate with the Secretary, stating the number required. They will be sent free of cost, but sufficient stamps for postage should be enclosed. The leaflet contains an appeal to the women of England on behalf of the rare Crowned Pigeon (*Goura coronata*), and the Victoria Crowned Pigeon (*Goura victoriæ*), whose plumage threatens to become popular for the decoration of ladies' hats and bonnets.

New Branch at Melbourne, Derby.—The formation of this branch was formally authorised at the Council Meeting held on July 2. The Rev. Arthur Myers, of Cliff Cottage, is the Honorary Secretary, and all applications for membership of the Branch should be made direct to him.

Field Club Saturday Rambles.—

August 1.—Meet at East Croydon (S.E. booking office) at 3. Walk to Ballard's Woods and Addington Hills. (London Bridge, L.B. and S.C.R., 2.25; Victoria, 2.35; Streatham Common, 2.50; Thornton Heath, 2.55.) Tea at Sandrock Hotel, Shirley. After tea to Elmer's End. Take return tickets to East Croydon.

August 8.—Meet at Woodside Park Station at 3.20; Moorgate Street, 2.38; King's Cross (G.N.R.), 2.50; Finsbury Park, 2.58. Thence by Totteridge and Totteridge Common to Mill Hill. Single fare from King's Cross to Woodside Park, 8½d. Guide, Mr. Carpenter.

August 15.—Meet at Theydon Bois Station at 3.27 (Liverpool Street 2.41.) Thence viâ Ambresbury Banks to Copt Hall Green. Tea at Rose and Crown. Take day ticket to Theydon. Guide, Miss Temple.

August 22.—Meet at Ashford Station, Middlesex, on arrival of 2.10 train from Waterloo (L. and S.W.R.) Thence to Laleham and the banks of the Thames, returning from Ashford. Guide, Mr. Field.

August 29.—Meet at St. Albans Station on arrival of 2.15 train from Euston (Willesden Junction 2.25, L. and N.W.R.) Take day excursion tickets for St. Albans, 1s. 9d. Thence to Cathedral.

Council and Committee Meetings.—The next meetings of the Council will be held on August 6, and September 3, at 5.30; and of the Magazine and Leaflet Committee on August 20, and September 17, at 5.30.

NEWS FROM THE BRANCHES.

Abinger and Shere.—On Saturday, August 22, Selbornians are invited to take part in a ramble in connection with this branch. The party will meet at Gomshall Station (S.E.R.) at 3. Tea will be provided at West Hackhurst at 5.30, after which there will be a short address by Mr. E. A. Martin. All wishing to join in the walk, or, if unable to do so, to come for the tea and address, are invited to write to Miss Forster, West Hackhurst, Abinger, Dorking, on or before August 15, who will be glad to have the opportunity of meeting members of other Branches.

EDWARD A. MARTIN, F.G.S.
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

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AN INTERVIEW WITH GILBERT WHITE.

[The following extraordinary experience of an American correspondent reaches us through the post. We have ascertained from a member of the naturalist's family that the information given may be regarded as authentic.]

BEING over in the old country on a holiday, I found myself at Selborne lately, where I met with the following surprising adventure.

Having lunched at the village inn, I mounted the Hanger by the zig-zag path and strolled across the common—"our sheep down," I think White calls it—and viewed the south-down hills, which I remembered with amusement the old naturalist calls "that majestic chain of mountains"! Afterwards I recrossed the common, and, coming to the edge of the Hanger, where the path, called by White "the Bostal," I think, begins its gradual descent, and whence one can see the old home of the naturalist, the church and village in the foreground, and the distance gradually melting away towards Hindhead in the horizon, I sat down at the foot of a beech tree and fell a-musing.

Suddenly I was aware of a rather short, slim, and very upright figure, dressed in black stockings and knee-breeches, and with a long coat and kind of three-cornered hat on its head, standing near me, apparently contemplating the village below. A full, old-fashioned, clerical wig crowned a very intelligent-looking head, whose eyes, I noticed, were brown, and very bright and keen-looking.

Jumping up from the ground I cried out, "Why, stranger, I guess you must be Gilbert White himself!"

"Sir," he replied, "that is my name; may I inquire what is yours?"

I instantly produced one of my professional cards, without

which I never travel, and handed it to the gentlemen, who took it with, I thought, rather an air of surprise.

Such an opportunity to interview a celebrity does not occur to an American reporter every day, so I at once commenced by remarking that I came from America, where Mr. White's book was much read and admired. A bow was the only reply. "May I ask, sir," I pursued, "do you find the village much altered since your time?"

"Not so much as I should have thought would have been the case," he replied. "Of course my own house"—and here I thought I detected a slight sigh—"is very greatly changed in recent years. I should not have known what to do with so vast a dwelling as it now is. I even thought that the "great parlour" which I built was a considerable addition; indeed, my good friend, John Mulso, used to speak of it as one of the finest rooms in the county; but he was ever enthusiastic. I should not have indulged myself with this extravagance had I not designed my house to be a home for my brother's family."

"Yes," I said, "sir, I remember your verse":

"'There like a picture lies my lowly seat;'

it is quite a fine villa, now, is it not?"

"Yet I liked it best as it was," he replied; "nor can I entirely admire the *vertu* shown in your modern style of architecture. Perhaps," he continued, "the village shops are the most altered. Plate glass was, indeed, a scarce luxury in my day: my poor village friends would have been frightened to enter such glittering places."

"Was there a school, sir, may I ask, in your time?"

"Why, no, not what you would call a regular village school, I think," he answered. "I remember that when my old friend, Mr. Etty, died, I resumed the curacy of Selborne after many years' interval, because his successor, Mr. Taylor, or, rather, his lady (Miss Lisle her name had been, of one of our best Hampshire families) so disliked the idea of residing in the parish that they were at first absentees. It then became my duty to make a report to the Bishop of Winchester about the education of the parish. I remember stating that we were too poor a parish to maintain a schoolmaster, but that we had a dame school where the children were taught reading, writing, sewing, and knitting. My father laid out in land the sum of £100, which my grandfather had bequeathed as an endowment for educating the poorer children."

"The present vicarage is quite modern, I think," I remarked.

"Quite," was the reply. "I should have thought it a pity to pull down the old one, which was good enough for my grandfather. It was an old-fashioned timbered house, which you may remember I described slightly in my *Antiquities of Selborne*."

"I hope, sir, that you approve of the new water supply, established in your honour," I here remarked.

"I very greatly approve of it," he replied; "but we kept the village in a tidier state than is now the case. Probably you have observed that the zigzag path, which was made by my brothers and myself, has now become much defaced and overgrown with bushes. I miss the maypole, too, which stood on the Plestor. It had a fine gilded vane, which I remember to have been merely a fixed one, and, therefore, useless, the last time it was restored. I successfully resisted the innovation, however."

"Did you make the zigzag yourselves, sir?" I said.

"Not exactly with our own hands," he replied; "though I think my brother Jack, of Corpus Christi College, Oxford, worked at it as a boy. We used to collect subscriptions for the purpose, and at our parlour games in the winter evenings paid forfeits towards the work; my brothers Thomas and Benjamin were liberal subscribers wherever it needed repair."

"And the Hermitage, sir, nothing now remains of it; where did it stand exactly?"

"At some distance to the right of where you now are," he replied. "We used often to meet there to drink tea. I remember, particularly, one summer when the Miss Batties——"

"The Miss B—— to whom your poem on 'Selborne Hanger' was addressed?" I interrupted.

"Yes," he said; "they were three very handsome young ladies, cousins of Mrs. Etty, the vicar's wife (who was a Miss Littleton), and used frequently to make a summer visit at her house. I recollect my youngest brother Harry had a vast flirtation with one of them—Miss Kitty Battie. She married eventually a Cornish squire, and the others also became the ladies of men of quality. In fine weather we often made a party to drink tea at the Hermitage. Sometimes Mr. Thomson's or other poems were read aloud; and often we sang rounds and catches together."

"And who was the 'young gentleman' whom you mention as acting the part of the hermit?" I asked.

"My brother Harry," he answered, "used to dress up as the hermit, and I thought he acted the part very well. It was supposed to be a secret, but one which, I think, most of our friends guessed."

Just at this moment a large brown bird flew noisily out of a beech-tree below us. I turned to look at it, and exclaimed: "Why, there is surely a honey-buzzard!" When I turned again to my companion I found myself alone. And I had forgotten to use my kodak!

All the friends to whom I have told this strange experience are pleased to remark on the strength of the Alton ale, the heat of the day, &c. But if I dreamed all this, how did I contrive to dream all the information I received, which I have certainly never seen in print? It was not a dream. No, sir!

CIVIS AMERICANUS.

NATURE NOTES FROM NORTHERN TASMANIA.

I.—Introductory: The Locality.

THE "study" in which these notes were written is a small slab hut, situated on rising ground, in the middle of a small block of bush land, fronting on a quiet sandy road, and distant about four miles from the township of Wynyard or Table Cape, which is built at the spot where the Inglis River empties itself into Bass's Straits. The dwelling is called a "slab" hut, because it is chiefly built of long thick boards called slabs, which are split (in this case) from a large, stringy-bark tree (*Eucalyptus obliqua*). The corner posts are young trees of the same species, felled, cut to the required length, and denuded of their thick, woolly bark. The chimney is a curious wooden structure, of a type peculiar to the bush; in composition, a mixture of slabs and palings. The rafters supporting the roof are young dogwoods (*Pomaderris apetala*), the roof itself consisting of small oblong wooden "slates," called shingles, which are split from the peppermint-gum (*Eucalyptus amygdalina*). The floor is slabbed.

The dry dogwood spars (*Pomaderris apetala*), which have been employed for some of the inside work, as well as lightwood spars (a variety of black-wood, *Acacia melanoxylon*), are great breeding places for beetles, and mention of them will frequently be made, as producing some interesting species of the order coleoptera.

The road towards which the hut fronts is soft and sandy, and fringed on both sides with many kinds of wild flowers, shrubs and trees. Just opposite here is a thick belt of eucalypts, mostly stringy barks (*E. obliqua*); and beyond that again is a stretch of plains—open, undulating, sandy country, covered with short healthy scrub, among which grow patches of tī-tree (*Melaleuca ericæfolia*), prickly mimosa (*Acacia verticillata*), he-oak (*Casuarina suberosa*), honeysuckle (*Banksia marginata*), and scattered eucalypts, mostly peppermint-gum (*E. amygdalina*), or white-gum (*E. viminalis*), which have a gnarled and twisted appearance on this sort of ground. Crossing the road again, and coming back to the little clearing, we find that thicker bush surrounds it on the other three sides, where the land is of better quality. Here the eucalypts, such as stringy barks (*E. obliqua*), and white gums (*E. viminalis*) attain a great size, while beneath them grow the "myrtles" (*Fagus Cunninghami*), also large forest trees, although not attaining to the stature of the big eucalypts. Beneath the "myrtles," again, grow a great number of smaller scrubs, such as dogwood (*Pomaderris apetala*), musk (*Aster argophyllus*), cheesewood and wirewood. The country is intersected by numerous "creeks," which is the name given to small fresh-water streams or brooks, along the banks of which numbers of

beautiful ferns are to be found, ranging in size from the great tree-ferns, often called "man-ferns" (*Dicksonia antarctica*), with great, brown shaggy trunks, to the lovely little filmy-ferns (*Hymenophyllum* and *Trichomanes*), which hang in myriads from the shaggy stems just described. Between these two extremes all sizes occur, as the fine bold-looking cathead (*Aspidium aculeatum*), the laurel fern (*Lomaria capensis*), with hard, dark green fronds, the graceful light green water fern (*Lomaria discolor*), the spreading umbrella fern (*Gleichenia flabellata*), and the blechnum. Curious erections, like miniature towers, may be noticed here and there close to the edge of the stream, made of the mud from the banks. They are the work of a small crustacean, just like a miniature lobster, but called, with the perversion of names usual in the colonies, "land-crab." These towers are open at the summit, and by looking down we can see a pool of water at the bottom, where the owner resides. Another, and much smaller crustacean, which appears to be identical with the British fresh-water shrimp (*Gammorus pulex*), is found in abundance, not only in the water of the creeks, but also under the dead leaves and sticks on its banks, and even among the moist, yellow hair which grows on the crown of the tree, or man ferns, where the fronds take their rise. The puzzle is, how do these shrimps get to their elevated position, eight or ten feet, or even more from the ground? Do they climb the stems of the ferns, or have their forefathers esconced themselves amongst the golden hair when the fern was in its babyhood and just rising from the ground, thereafter ascending with it, continuing to live and multiply among the moist fibres without ever entering the water at all? The latter seems the more reasonable theory, for the crown of these tree-ferns is always very moist, and the little crustaceans could live there in comfort and security, quite shielded from the eyes of hungry, prying birds.

In these bush-rivulets is also found the dainty little mountain trout (*Galaxias truttaceus*), a smooth-skinned, native fish, spotted like the common trout, and making an excellent dish when lightly fried. In the larger streams, where the bottom is somewhat muddy, may be found the black-fish (*Godopsis marmoratus*), dark in colour, as its name implies, the skin smooth and slimy like that of an eel. Some of these fish attain a nice size (five or six pounds), and they are bold biters, especially after dark, which is the time usually adopted by the bushman to sally forth in quest of them. The new arrival from British shores, however, finds this nocturnal angling anything but fun, as he is assailed immediately upon arriving at the water's edge by myriads of mosquitoes, which continue to feast upon him so long as he continues to fish, unless he prefer the alternative of making a "greenstuff" fire close by, and sitting enveloped in clouds of pungent smoke.

The prettiest fish found in these northern waters is the "fresh water herring," or grayling (*Prototroctes muræna*), a bright,

silvery, lively-looking fish, with a delicious odour of cucumber when handled. Like the "black-fish," previously mentioned, it seems to be peculiar to the rivers of the northern part of our island-colony. These cucumber grayling are very abundant in some seasons, swimming in shoals, and jumping at the flies and moths which play over the surface of the water. They are a delicately-flavoured fish, and are great favourites with those visitors who come to the garden-colony to escape the burning sun of an Australian summer.

Table Cape. H. Stuart Dove.

JACKALS.

LINNÆUS called the jackal by the Latin name *Canis aureus*, or "golden dog" owing, no doubt, to the assumed colour of its fur, and most naturalists have retained this name to the present day, though the colour of the fur is variously given by some of them as follows:—(1) mixed grey and white, and tawny on the shoulders, haunches, and legs; (2) ruddy yellowish-grey generally, and darker on the back; (3) yellowish-grey above, and whiter below, thighs and legs yellow, ears ruddy, with a black tip on the tail; (4) grey above, and abruptly changing to a paler tint below; (5) dusky yellow tint, hairs mottled black, grey, and brown, lower parts yellowish-grey, and tail reddish-brown ending in a darkish tuft; (6) ground tint, a dirty fawn, becoming blacker on the side and back, under surface white, reddish-yellow, or grey, with ill-defined dark bands on the shoulders and hind-quarters; (7) a pale isabelline to a pale rufous, with a larger or smaller admixture of black on the upper parts, the under parts are paler, the muzzle, ears, and outer sides of the limbs more rufous than the rest, the reddish brown hairs of the tail have long black tips, thus forming a distinct black tip to the tail itself.

I might, indeed, add to this list, but enough has been said to show that it is by no means an easy task to define the precise colour of the fur of this animal, and for the simple reason, in my humble judgment, that some specimens have been viewed with their summer and some with the winter coat on, while sufficient consideration has not been, perhaps, given to the age and locality of the animal, which greatly affects the colour of its fur. Again, some of our naturalists may have described the African variety of jackal, which is known to be generally of a greyer hue than its Indian congener. I may also add that, like some other mammals and birds, fish and insects, due allowance must be made for that provision of Nature which enables them to suit their general colour to their surroundings, presumably by way of self-protection.

The jackal of the Punjaub and the North-west provinces of India, is described to me by Mr. John Barlow as generally of a brownish-grey, the tips of the hair being black, while those I have met with in Southern India were of a dark greyish tan colour on the crest and upper part of the body, with projecting black hair along the ridge of the back, the colour beneath being slightly paler, with the muzzle and ears darkest of all.

My friends the Barlows tell me that in Northern India they have come across jackals of a perfectly spotless white fur, with eyes pink or blue, albinos in fact, and, upon one single occasion only, Mr. John Barlow saw one with its fur of an intensely black colour. The Albinos, five in number, were found on an island in the river Indus opposite to the large plain of "Chach," and the black variety was seen at the fort and village of Attock.

It may not be generally known that skins of the ordinary Indian jackal are sometimes imported into Europe, and I lately saw here a carriage-rug made from them, but which the owner ascribed to the Indian fox.

Though, as I have already said, our naturalists term the jackal *Canis aureus* or "golden dog," the natives of India, where the animal abounds, have never spoken of it as of that colour. They have stories in abundance of its wonderful cunning and sagacity, but these are of comparatively modern date; and even in these the animal is nowhere called golden. While there are many ancient poems touching laws and religion, chiefly from the Hindus, which are amongst the oldest records in the world, it is passing strange that there does not appear to have risen a single native who concerned himself to write on the life and habits of animals. It is true, as Balfour says, that a work was written in Arabic about A.D. 1363, by one "Zacharya" on the "Wonders of Creation," which, two centuries later, was translated into Persian; but it was a work of little account, and most of the descriptive text was purely imaginary.

The term "jackal" seems to have come to us from the original Persian word "shaghāl," which in Turkish became "chakāl" and in French "chacāl," and this is very much as it would become to be known in Europe, for it ranges from its home in India and Ceylon through Persia, Arabia, and as far as S.E. Europe. In Africa it ranges as far south as Abyssinia and the surrounding districts. The native name for it in the Punjaub and some parts of Bengal is "gidur," in Southern India it is more commonly called "kolā," while from the ancient Sanscrit it takes the name of "siyār." I have never seen it in the Malayan Peninsula, though it may be there under the Malay name "srigālā, but I am inclined to think that this is not the jackal, but a larger animal, the "wild dog," and known to naturalists as the *Canis gamaliensis* or *rutilans*:—

In size and appearance, the Indian jackal is somewhat intermediate between the wolf and the fox, but smaller than the former, and I may safely say it is ordinarily twice the size of

our English fox. It is strong in build, with the sharp nose and ears of the fox, and with a bushy tail. It interbreeds with the common dog, and indeed by some it is supposed to have been its progenitor. The period of gestation is the same, and the hybrid is fertile; still, as we know, there is no friendship between the domesticated dog and the wild jackal, hence it is frequently hunted with dogs, as the fox is in this country, the hounds being usually imported from Europe, though sometimes native breeds are employed.

In its habits it is infinitely more cunning than the fox, or, as Mr. John Barlow puts it, in his usual terse and concise way, "the English fox is a fool compared with him." In simulating death, the Indian jackal excels indeed, the dervish of the desert, and when in the actual mouths of the hounds will lie as if stone dead, and then, choosing his opportunity later, will pull himself together and scamper off into the jungle.

This variety of the jackal has been truly termed a vulture amongst quadrupeds, he devours any flesh he can pick up in the shape of a dead camel or bullock, and any food he may find about the villages, yet withal he is very partial to the wild plum (*Zizyphus Jujuba*), the sugar-cane, maize, melons, and even coffee berries, when he has a chance; and the farmers have great difficulty in preserving their crops from these clever thieves. In the Punjaub it is usual, by way of protection, to picket a dog at each corner of a field when the crops are ripening, and the farmers make choice of dogs of different colours; the white dog they call "Bugla," after the Sanscrit word for a white crane, the black dog is termed "kaloo," also from the Sanskrit signifying black, while the spotted or party-coloured dog is nicknamed "Dubba," from the Punjabi word "dub," a spot.

The farmer sleeps in a hut in his field, and when he hears the sound of the jackals he shouts to the dog by name who may be in the corner where they are approaching, and adds the words, oft repeated, Tho! Tho! Tho! which answers to our signal by the whistle. Notwithstanding all these precautions, however, both he and his dogs are often cleverly baffled by the jackals, who to get at the cobs of the maize or Indian corn, will quietly press their breasts against the stems until they bring them to the ground, and to procure a feast of the wild plum they have been known even to whisk their hairy tails so as to catch the thorns of the bush, and, by a succession of shakes, to bring down the fruit.

As one more proof of the extreme cunning of this animal, I may quote Sir Emerson Tennent's work on "Ceylon," where, in referring to the jackals on that island he says: "They are frequently in the habit of hiding their booty, and, if observed, will seize some indifferent article and make off with it, as if that were the object of their solicitude, returning to their real spoil at the first convenient opportunity." I have known our domesticated dogs to bury the bones from their meal; and every one

will have noticed another relic from the untamed state of our dog pets in the habit of turning round and round before settling to take rest.

I suppose that no account of a jackal would be complete without some reference to its midnight howl, which, to my mind, is one of the most ghastly and hideous that can well be imagined; yet I have known some Anglo-Indians to be quite fascinated with it, as I have known, also, some to be enamoured of the fruit of the durian. Truly, "there is no accounting for taste." The howl has been described by some as the barking of dogs, mixed with the audible cry of human distress; by others it has been compared to the sound of children under severe chastisement. But, perhaps, the best idea of these yells is that well-known jingle devised by one of our countrymen, which, when set to the tune of the animal's cry, and modulated as it invariably is, runs thus:—

A dead Hindu! a dead Hindu!
Where? Where? Where? Where?
Here! Here! Here! Here!

I must not omit, even at the risk of being thought tedious, to refer to the "Siyar Singhi," or "Jackal's horn," called by the Tamils the "Narri-comboo." The native idea is that the jackal which first utters a cry of an evening has a bony outgrowth on the forehead—a sort of horn, covered with hair, which it is thought very lucky to become possessed of. If this horn is put amongst jewels no robber would dare to touch them; while others believe it to be a very powerful philtre; and Mr. W. Crooke, in his Indian folk-lore, says that the "Korwas" of Mirzapur tie it, or a resemblance of it, round the necks of their children as a charm, and to keep off the "evil eye."

The cry of a single jackal, without response, and known as the "Ikyreah" is, according to Mr. John Barlow, a dreaded omen amongst "Thugs" and "Phansigars" (literally stranglers), and, when heard in any neighbourhood where they may be, they at once quit the spot as unlucky; while, on the other hand, if they hear the usual 'Roh-rine,' which in Sanscrit means the "night-cry," or general chorus of jackals, they pounce upon the first person they meet as a victim, in perfect confidence that their goddess, Devi, will befriend them. Thuggee is now, happily, almost a crime of the past, and India may well bless the day when Christianity and western institutions came to be introduced amongst her singularly varied nationalities and peoples.

J. F. A. McNair.

THE NATIONAL TRUST: ITS WORK AND NEEDS.

THE National Trust held its Annual Meeting in July under the Presidency of the Duke of Westminster at Grosvenor House, and among the speakers who advocated its claims for support were Sir Robert Hunter, Mr. Alfred Waterhouse, R.A., the Right Hon. Shaw-Lefevre, Canon Wilberforce, Professor Herkomer, Mr. Walter Crane, Mr. Briscoe Eyre, Mr. Ashbee, and the Hon. Secretary, Canon Rawnsley. Letters were read from Lord Thring, the Earl of Winchelsea, Mr. James Bryce, Sir George Baden-Powell, the President of Magdalen, W. B. Richmond, R.A., and others, so that it cannot be denied that this, the youngest-born of our patriotic societies that aim at preserving beautiful and historic Great Britain to future generations, lacks support of men who carry weight with the public mind. But its aims and claims are as yet comparatively unknown.

It is a body of men whose council is partly elected by the annual meeting of its members, and partly representative of the universities and great national institutions of the land and societies with kindred aims. Thus the Commons Preservation Society, the Society for the Protection of Ancient Buildings, the Society of Antiquaries, the Royal Institute of British Architects, the Linnæan and Entomological Society, the Kyrle Society, and last, but not least, the Selborne Society nominate a member upon the Council of the National Trust. A very interesting communication was made to us at our Annual Meeting by the Selborne Society's representative, Dr. Dudley Buxton. Its Executive has such names upon it as Sir Robert Hunter, Mr. Maurice, Mr. St. Loe Strachey, Miss Octavia Hill, Mr. Briscoe Eyre, Mr. Ashbee, Miss Yorke, and Mr. Herbert Phillips.

It is the only body in our land with kindred aims, that has a charter, and can as a corporation hold whatever lands or houses come into its hands in trust for the nation. By the articles of its association it cannot divide any profits among its members. Its work is purely patriotic and public-spirited. It aims at rescuing from the hands of the speculator or the jerry builder, or the improver, the beauty-spots of our land. The waterfalls, the wild glens, the coast cliffs, the reaches of river, the celebrated view points, the stretches of moorland that from time to time may come into its possession to keep "secure from rash assault." It aims at securing from demolition or decay the historic houses or sites associated with the past history and literature of the land. It aims at preserving any national monument or ruin of national interest from destruction; but it does not aim at being a wealthy corporation. It looks upon itself rather as a body to receive gifts and be their custodian. And it has already become possessor of the most beautiful part of the sea cliff above the town of Barmouth, and has been asked

to undertake the custodianship of a monument to three men of national note upon an historic battle-field.

But occasions arise when it must raise funds suddenly or let slip golden opportunities of purchase or preservation, and such cases have arisen. In Sussex, at Alfriston—the town of Alfred the King—still stands a unique specimen of a fourteenth century clergy house. This has been handed to the Trust for a nominal sum, and acting on the advice of Mr. Waterhouse, R.A., and the Society for the Protection of Ancient Buildings, it is endeavouring to raise such a sum as shall put it into substantial repair—£250 is required. So urgent is it, that, feeling that unless roofed in before the winter it may perish, Miss Octavia Hill has offered to guarantee £25 if the amount can be raised, and Mr. Herbert Phillips promises £50; other smaller sums have also been given. But where the rest is to come from only your readers know; and it seems a pity that for want of an appeal to all who, like Selbornians, care for beautiful England, future generations should be unable to realize how the secular clergy lived in pre-reformation times. This is a house whose antiquity and associations might well appeal to Roman Catholic and Protestant alike.

The second earnest appeal which was made by the Duke of Westminster, Canon Wilberforce, Mr. Herkomer, Mr. Walter Crane and others, was for £290 to complete the purchase for the nation of one of the most interesting headlands on the Cornish coast, the Barras Point opposite Tintagel Castle. Any lovers of Arthurian legend must see the difference in the interest of the associations with olden-time romance that will be possible to those who stand on Barras Headland and gaze across Arthur's Cove from the Point as it is, and the effect the scene would have upon them if the same headland was the adjunct of an hotel, or the terrace ground of some sanatorium. Thanks to Lord Wharncliffe, the headland last year escaped the possibility of this fate. His Lordship is willing to hand it to our Trust on the terms of the purchase price he paid for it, and thus to enable it by charter to be always *in statu quo* for lovers of our Cornish coast, for botanists, for students of bird-life, for painters and poets and holiday-makers who love

> "The sea-girt walls as nature bade them be,
> Where dark Dundagel frowns above the sea."

If any of your readers will help by sending, no matter how small, a subscription to the purchase price of that wild fourteen acres and a half of faerie and romance and glorious Cornish scene, the National Trust will be grateful. Any further information would be most gladly given by the Secretary, Mr. Laurence Chubb, 1, Great College Street, Westminster, at whose office the articles of association of the Trust can be seen, and from whom the annual report, presented at the last meeting, can be obtained.

H. D. Rawnsley.

A STRIKE AGAINST DOCKERS.

We've often heard of dockers' strikes,
But listen now, ye mockers!
I write to ask whoever likes
To strike against the dockers.

The man that docks his horses' tails
Is fit for any treason:
For such an act our best wit fails
To find out rhyme or reason.

Watch a horse going like the wind
(We've seen it many a time, sir),
His full tail streaming out behind:
The sight is quite sublime, sir.

And can you, outside Colney Hatch,
Still think your horse's leg, sir,
Looks best with what the witch's snatch*
Left Tam O'Shanter's Meg, sir?

So, if the fashion should come in
To practise squirrel-docking,
You'd only look with vacant grin,
And would not think it shocking.

O no, you'd only say, we guess,
"What fashion could be sweeter?
Nature's a bungler, we confess:
Docked squirrels look much neater.

"That bushy tail so dwarfs their shape,
'Tis better to remove it;
To make them tail-less, like an ape,
Will very much improve it."

If men so follow Fashion's beck,
They'll want, as they grow older,
To pare away their horse's neck,
Because "it spoils his shoulder."

We watch docked nags; for, though 'tis sad,
'Tis hard to take our eyes off:
Poor brutes! 'tis strange they don't go mad;
How can they drive the flies off?

* See the end of Burns's ballad.

If they could speak, we think we know
What kind of words they'd say, sir—
"'Tis very hard to use us so,"
Say hunter, hack and racer.†

The man that owns or keeps a horse
Should be his horse's friend, sir,
Supply his wants, and—this of course—
Not dock his hinder end, sir.

If every docker could be docked,
Or sent from dock to gaol, sir
(Although your feelings may be shocked),
No horse would give them bail, sir.

Alas, alas! the docker knows
The story can't be told, sir:
How shall a docked horse speak his woes,
Or any tail unfold, sir?

F. M. Millard.

THE HARE.*

No less than six authors contribute to *The Hare*, and though by this means we have the views of specialists upon the life history of the hare, and the various ways of dealing with her, alive and dead, we hardly think the present instalment is in all respects quite up to the level of the other volumes of the series. It might be anticipated that it would be difficult to fill the usual eighty or ninety pages allotted to this branch of the subject with an account of what is, strictly speaking, the natural history of the hare, and accordingly we find two out of the four chapters in the first division devoted to the laws about hares and poaching. And, while these afford interesting and instructive reading, there are a few points relating to the habits of the hare which we should have gladly seen mentioned. For instance, the particular kind of lying which a hare favours (apart from a local preference for certain fields, which is well marked), mentioned, indeed, later on by the author of "Hunting the Hare"; its habit of taking particular lines when coursed; of coming on to the dusty high roads in the dawn of a summer morning to dry the dew from its feet before repairing to its form; of going to ground when coursed, and some others. But, in his opening chapters, Mr. Macpherson discusses fully and pleasantly the general natural history of this valuable animal, and readers will find full information upon such points as food, weight, the number of leverets born at once and the season of their birth, the distribution of the hare and its variations, with remarks on disease, pace, and the distance a chased hare can cover in a leap. In this connection the difference between the track of a hare and that of a rabbit might have been pointed out, as well as the difference in the

† It is said that race-horses are not docked; but that steeple-chasers are.

* "Fur and Feather Series." *The Hare.* Natural History, by the Rev. H. A. Macpherson; Shooting, by the Hon. Gerald Lascelles; Coursing, by Charles Richardson; Hunting, by J. S. Gibbons and G. H. Longman; Cookery, by Col. Kenney Herbert. Illustrated by G. D. Giles, A. Thorburn, and C. Whympa. Pp. x., 263. Longmans, 1896. Price 5s.

arrangement of the four marks when going fast or merely lobbing along in an undecided way—for it is not everyone who has studied tracks in the snow. With regard to the statement that hares and rabbits do not thrive very well together, we think this requires qualifying (though we agree with the author that the former will not graze on land defiled by the latter), for we can eall to mind a certain estate on which hares, preserved for eoursing, were very numerous, which also supported a large head of rabbits. As to disease in hares, we reeollect that in 1880, after the disastrous wet summer of 1879, many hares were found dead at the time the sheep were dying of liver fluke, and it was said that the hares died from the samc cause. People who buy "Scotch hares" in the game-shops might wish for fuller particulars of this species, the *Lepus variabilis* of Pallas. Nothing can exceed the soft silkiness of the fur assumed in winter by the mountain or blue hare north of the Aretic cirele, and the widely-separated toes, fringed with long, stiff hairs, are a beautiful provision of nature to enable it to traverse the snow with ease and eomfort. The footmarks made by a northern hare when crossing a snow-field are more than double the size of the prints made by the brown hare.

Mr. Maepherson's views upon poachers as a criminal elass, the result of much experience ("I handle," he writes, "so to speak, hundreds of poachers"), are naturally sound and to the point; but we fear it would be very difficult to make poaching unprofitable until we are all fit to live in Utopia. There is a great deal of interesting poaching information in the fourth ehapter. Loeal customs or fashions in poaching doubtless vary; we have never personally met with a snare (though we see more than we want to see) composed of as many as six or seven strands of wire, a double twist generally eontenting the thieves of our own district. We wish Mr. Maepherson could have told us something about a "hare pipe." William Lawson, in *A New Orchard and Garden* (1656), when enumerating the "natural things externally hurting orehards," the hare among them, and the means of prevention, writes that you must have "an hare-pipe for an hare."

The shooting chapters open with some sound and sensible remarks upon the Ground Game Act, whieh we hope will be widely read. And we may say the same of the warning to youthful sportsmen—not to fire a long shot at a hare going straight away. If the members of thc so-called "Humanitarian League" would sometimes read a book on sporting, and try to know a little about what they talk of so glibly, they would find that sportsmen are not all uselessly cruel. The second chapter of this division contains some more about poaching, with good practical hints for circumventing the same, and an aeeount of taking hares by hawking with the long-winged gerfaleon and the short-winged goshawk; but it is hardly correet to speak of "the Bonelli eagle!" There is also a very pretty and well-written deseription of the preliminaries of a blue hare drive, which gives us some insight into the habits of this species. From thc ehapters on public and private eoursing (forming a valuable handbook for votaries of that sport) the naturalist may cull some seraps, notably as to the paee of the hare, which, in favourable weather, "can set the best greyhounds at defianee and run them to a standstill." I think no one can realise the pace at which a hare goes until he sees it race away from greyhounds on the level. Thcre is a bright and pleasantly-written chapter on beagling, with 15-inch beagles, whieh, in the opinion of the author, "presents sport in its truest clements." "The sport of hunting a hare with a paek of hounds," writes Mr. Gibbons, "is so old that, in comparison with it, fox-hunting is but a plant of mushroom growth." Though thc old ways, when one could enjoy a nearly eight hours slow ehase with "Sir Roger de Coverley's harriers," are passed away, there is still room for the exereise of the powers of observation when hare-hunting, and the chapter on the pursuit of the hare eontains some instruetive remarks about habits, favourite lying grounds, and the shifts and stratagems adopted to baffle its pursuers by an animal which "spends her life in being hunted." A hare out of her own country has beeome almost proverbial, and we read here that a hunted hare makes her usual rings, and keeps to her own ground until, from some unexplained cause, she loses herself, when she "will make off endways." The chapter on the harrier naturally deals with the hound rather than the hare. Exeellent as the essays on cookery in all the volumes of the series have been, it will not be uneomplimentary to their authors to say that the thirty-five pages devoted to the eookery of the hare is, perhaps, the best

of them all. Although the hare does not appear to be mentioned in the early lists of food-stuffs, yet, when once our ancestors tasted it, they soon seem to have found out the best way of cooking it, for some of our modern recipes are practically the same as those in vogue in the reign of Richard II. Colonel Herbert, upon excellent authority, combats the old idea that a coursed or hunted hare is infinitely superior, from an epicurean point of view, to one killed by the gun. In this connection it is pointed out that since the Ground Game Act came into force the hare, contending with too many enemies, has deteriorated in its edible quality.

The nine illustrations are less attractive than those in previous volumes. We like best the blue hares in "A Hare Drive." In "Snared," while the head is good, the hind feet are very coarse, and the dead hare has an unfinished appearance behind. We would gladly have been spared the picture of a hare with a broken leg, "Making for the Hedgerow"—a painful sight, which does not need immortalising.

O. V. Aplin.

SHORT NOTICES OF BOOKS.

*Angling Days** is a collection of short articles which have appeared in *The Angler*. Though, like many newspaper articles, they are rather light when brought together into a book, the fisherman may find the volume useful to put in his basket against a time when he is waiting for fish to rise, or to keep him awake for an hour after supper in out of the way country quarters. Some of the subject-matter will be familiar reading, for several of the articles consist merely of extracts from books, fitted together with a few necessary or explanatory sentences. There are a good many accounts of fishing days, and a few sketches of scenery of the kind with which we have been rather too familiar of late years. These extracts will give an idea of their style and the weight of their substance. "The water exactly reflects the colour of the sky. I have seen it blue: to-day it is a dull stone tint." "Where the brook comes out the stones are thickly covered with damp moss, and on the bank opposite is a bed of young green nettles, the dry stems of last year's growth rising among them." "Now a cock crows, and a rumble of cart wheels on a distant road. These are country sights and sounds. This is the country's heart." We have, of course, the inevitable Walton article, but are surprised to find that the author, from long experience of anglers, knows "that very many know nothing of Walton's book." There is not much natural history in *Angling Days*. The author envies the knowledge possessed by "many a farmer's boy," of "the name of every bird from the note it sings." Elsewhere he speaks of a "large sea-bird like a heron," sailing slowly overhead; but he knows the names of some of our wild plants, and finds it a distinct pleasure to do so. The four pages devoted to the otter contain but one original observation, and that not very correct, anent an otter's footprint on the snow, which is said to be much like a dog's, only larger. The remainder of the article appears to be chiefly extracts from the works of other writers, though a failure of the inverted commas leaves us in doubt of how far one extract extends. The book is illustrated by half a dozen pretty river scenes.

From the same author we have *Walks round Hexham* (Hexham: Catherall, price 6d.). "A handy guide book to the town and its surroundings," which will be found extremely useful and interesting to any one visiting a neighbourhood possessing, to judge from the descriptions and very nice illustrations, considerable natural and antiquarian attractions. At the end of the book there is a list of the plants found flowering in April, May, June and July. Also some "Bird Notes," consisting of an annotated list of the species found in the district, without any sort of a systematic arrangement. The "Grass Bunting," which is said to be

* *Angling Days and an Angler's Books*, by Jonathan Dale, pp. 160. "The Angler" Co., Limited, 143, Strand, W.C.

common in summer, is a species with which we are unacquainted, even by name, and the particular species of "Woodpecker," which is "rare," is not indicated.

We have received the first part of the beautiful edition of *The Compleat Angler*, which Mr. John Lane is publishing in monthly instalments at 1s. each (net). It is excellently printed, and has numerous and appropriate illustrations by Mr. Edmund H. New. There is a sudden rush of cheap editions of popular illustrated works on natural history, and Messrs. Lloyd send us the first instalment of theirs, in which Dr. Sharpe begins the history of British Birds. A hundred and twelve pages of letterpress by a master of his subject, illustrated by eleven coloured plates, make up about the cheapest sixpennyworth we remember to have seen.

The new number of Mr. Walker Miles's *Field Path Rambles*, devoted to Epsom and its delightful neighbourhood, comes in time for mention, though not soon enough for notice, in our present issue.

We are compelled once more to ask the patience of those who have sent us books for notice, the pressure on our space rendering it impossible to deal with many of these in our present issue.

SELBORNIANA.

Hampstead Heath.—At a meeting of the London County Council on Tuesday, July 7, the Parks Committee reported that it was their intention to preserve Hampstead Heath as far as possible in its natural state. They therefore recommended the Council to reduce the number of "workmen" on the Heath to three, whose work would be strictly limited to clearing up refuse, clearing out water-courses, repairing footpaths, staking and tying trees, and similar indispensable operations. The recommendation was adopted. Public opinion urgently demands that some person, or persons, of taste should be appointed to overlook *all* work done on the Heath; also, that many of the newly planted trees (said to be nine thousand) should be removed, as it is universally felt they are misplaced.

Taming the Birds.—At this season of the year the garden is generally pretty full of young birds, and when this is the case it is very easy to make them tame. All you have to do is to place a chair in a conspicuous position, and take your book and read *quietly*, and when the young birds come near, throw them a few crumbs of bread, taking care each day to diminish the distance between the birds and yourself. At last the birds will grow so tame that they will eat out of your hands and fly on your knees and shoulders. For an invalid I can imagine few things more entertaining than sitting out of doors in a comfortable chair with the birds tame all round, and feeding from your hands. In my time I have tamed a great number of birds, bull-finches, linnets, robins, &c., which would follow me everywhere. Of course one must whistle or talk to the birds, so that they will grow familiar to your habit of calling them.

Melbourne, Derby. ARTHUR MYERS.

The Forest (p. 164).—Thinking that my article would be of interest to such a past master in the woodman's craft as Mr. Gladstone is, and that Forestry was of an importance to deserve the advocacy of his powerful eloquence, I sent NATURE NOTES for August to Hawarden Castle, and the venerable statesman writes to me as below.

Slapton, Kingsbridge. GILES A. DAUBENY.

"I agree with you upon the very great importance of the subject of Forestry, and shall be very glad if you can induce our countrymen to give it an increased attention.—W. E. GLADSTONE."

"Aigrettes" in the Army!—I do not think it is generally known that ladies are not the only barbarians in the matter of wearing aigrettes. I was in some lodgings lately where the landlord made plumes for the Guards. Some of these were brought up for my inspection. They were indeed beautiful, but alas for the poor birds. In one plume were £2 10s. worth of splendid aigrettes! Who is responsible for this wholesale destruction?

AGNES L. DRURY.

NATURAL HISTORY NOTES AND QUERIES.

Nightjar and Chiffchaff (p. 176).—I have more than once heard the nightjar making its "churring" noise during the day-time this summer, but the sound was somewhat subdued and broken, and not the long-continued rattle that it makes after dark. With regard to the note of the chiff-chaff, I do not know of any other decided song than the bird's usual *chiff-chaff*, though I have sometimes heard it utter a very shrill *cheep cheep*, and on more than one occasion mistook it for a chaffinch. Morris remarks, in his description of the chiffchaff, that the *alarm* note is a loud *hoo-id*.

V. B.

On one occasion only have I heard the nightjar earlier than seven o'clock. This was on May 23, 1889, when in a neighbouring wood I heard an individual uttering its jarring note so early as 5.30 in the afternoon, the sun shining brilliantly at the time. The chiffchaff will now and then vary its note. I remember hearing one repeat its song thus several times in succession—*feel, feel, chiff-chaff, chiff-chaff*. This was in July.

Fyfield, Abingdon. W. H. WARNER.

Greater Spotted Woodpecker.—About here this shy bird is fairly common, there being several spots where one always expects to see them; rarely, however, is their near acquaintance to be made. They are generally to be seen holding bolt upright on to the topmost spray of some tree, when they emit a peculiar note which is easily recognised. When riding my bicycle one day in the middle of June, I came suddenly on a brood which had only just left the hole in the tree in which their nest is placed. It was curious to watch the anxiety with which the old birds resented my presence. They flew round me some fifteen paces off, then settled on the trunk of a tree near by for a moment or two; as I moved on they kept ahead for a hundred yards or so, flying from trunk to trunk, and at last, wheeling round close past me, rejoined their young.

Market Weston, Thetford. EDMUND THOS. DAUBENY.

Toad and Snake.—On Tuesday, Aug. 11, at 1.30 p.m., I had been sitting for some minutes on a wooden rail dividing "White Down," about two and a half miles from here, from the road, when a large yellow toad with bright black eyes emerged from the long grass at my right, and by hurried leaps reached the middle of the road and then abruptly stopped; in a few seconds there glided from the grass a snake, which fastened itself on to the hind-quarters of the toad, stiffening itself out at full length as if to intensify the strength of its grip. In vain the toad jumped into the air, partly lifting the snake with him; the grip was never relaxed, and the toad fell back discomfited. I fear I watched this cruel process for two minutes, but then I came forward, and with the butt end of my umbrella I succeeded in killing the snake, which was of a dun colour, and had across its brow a band of yellowish-white; it was certainly a yard and a quarter long, indeed, I think it was even longer; it reared up when hit. Having killed the snake I tried to help the toad, and I endeavoured to push it with my umbrella towards the grass on the shady side of the road, but whenever I touched it it gave a squeal, so I then opened my umbrella, and trailing it on the ground, contrived to scoop the toad into it, when I carried it to the shaded grass. Some three hours afterwards I returned to the spot to see how the toad was going on, for its hind legs had been badly lacerated, and I found it had moved about a yard from the clover in which I had placed it, and on approaching it it jumped without any difficulty on to a heap of stones somewhat assimilating in colour to itself, and seemed still so full of life that I do not think it is going to die. Two questions arise which I cannot answer, but which I hope may be answered by others better informed than myself. First, what was the object of the snake in pursuing and gnawing the toad? its size would seem to render it impossible for the snake to have swallowed him even when dead, for the toad was as large as a boy's fist. Secondly, why did

the toad, when gently pressed by me, squeal, when it made no sound while the snake was mangling it in detail?

Abinger Hatch, Dorking. W. MILLIGAN.

Cuckoo Life.—Some rather curious phases of cuckoo life have fallen under my observation during the last month or two. Living in a quiet country house with high ivy-covered walls surrounding the gardens, bird life is greatly in evidence. This spring a pair of robins built their nest on an ivied wall a few yards from our dining-room windows. When the eggs were within a few days of hatching we were surprised one evening to hear both the robins crying out in alarm, and flying about wildly, and to see a cuckoo flying to their nest. The two owners attacked the intruder and pecked it so fiercely about the head that it was obliged to beat a quick retreat. In a few minutes, however, it returned to the fray, but so hot and well-directed was the home defence that the cuckoo rolled over on the lawn. On its regaining its feet, both the robins stood on its back and pecked with might and main; this finally routed the enemy for the evening. But the following morning the battle was again fought, with the same result. The robin sat on her eggs two days longer, and then forsook her nest. About a week ago we heard the well-known squeak of a young cuckoo crying for food. On going into the garden we saw our young visitor being fed by a pied wagtail. What was our surprise however, a few days ago, to see the cuckoo on the wall accompanied by a hedge sparrow as well as the wagtail, and that both were feeding it! The feeding goes on daily in sight of our windows, all the birds being very fearless.

Chesterfield. G. E. M.

An Indian Crow and his Nest.—The following singular act of systematic theft, carried on by a crow, is literally true. Messrs. Lawrence and Mayo, opticians, have a place of business in Rampart Row, Bombay, and rooms also in Forbes Street, where pebbles and the frames for spectacles are manufactured. The assistant in charge of the latter found out quite recently that a large number of gold, silver, and steel spectacle frames had very mysteriously disappeared. The men employed were at first suspected; orders were given that no one but the manager should have access to the room. The thefts, however, continued day by day; the manager could find out nothing. One Thursday, however, whilst attending to his work, he was startled by hearing the flapping of a bird's wings at the window, and saw a large crow, which, when it had picked up a frame in its beak, flew away in the direction of the building occupied by Messrs Greaves, Cotton & Co. The bird was observed to carry the frame which it had stolen on to the roof of their building; and permission having been obtained from the occupiers of the premises to go over the roof, the assistant found that the thieving bird had constructed thereon for itself a cosy and comfortable nest, composed of the missing frames. The design of this gold and silver structure was so ingenious, and presented such a beautiful appearance, being so deftly and carefully woven together, that it was decided to keep it intact for a time, and before the materials were unwoven and separated, Messrs. Lawrence and Mayo had a photograph of the nest taken. There were altogether eighty-four frames, of the aggregate value of about 500 rupees (£50), which had been stolen by the bird, and were it not for the fact that it was discovered in time, the poor workmen of the establishment would, no doubt, have got into trouble.

T. B. DICKINS.

Poisoning of Young Birds.—Since Miss Corbet's remarks about the poisoning of young birds by their parents, I have heard from several people in this neighbourhood that it is not an uncommon thing, though, strange to say, I never heard it before. I have heard it of kestrels, blackbirds, and starlings, and the impression seems to be that the poisoning is done with some leaf. It would be interesting to find out what leaf.

North Moreton, Wallingford. M. S. Y.

Elms and Frost.—Never until this year have I seen elm trees injured by frost. Several of the finest elms in the village flowered very freely, and the

foliage, as usual, was not so developed among the bloom as on the young shoots growing out of the trunk of the trees. A late frost in May turned all the upper foliage rusty, and brought the barely-formed seeds to the ground in showers long before the usual time. The heads of the trees have never recovered, but are comparatively scantily clothed, while the shoots below are in thick and large foliage and make the trees look as if they were growing out of some other kind of tree. The other trees close by which did not flower, are as usual. I noticed that most of the elm blossom in the neighbourhood was nipped, and did not arrive at the usual beautiful crimson hue.

North Moreton, Wallingford. M. S. Y.

Cows and Fish.—A friend who lives by the Thames tells me that he has been much amused this summer by watching fish jumping out of the water in order to pick the flies off the legs and bellies of the cows, as they stood cooling themselves in the water. The plunging round of the creatures' heads and swishing of their tails did not alarm the fish in the least. I do not know whether this is an uncommon occurrence, but the same friend says he has twice seen a kingfisher *hover* over the water, and the second time dive obliquely and catch its fish. He said it looked like a large moth hovering, with tail depressed. He has often been on the river but has never seen this before.

North Moreton, Wallingford. M. S. Y.

Stonechat (p. 177).—"The pretty little fellow with the russet breast, white choker, and black cap," seen by your Bath correspondent at Lyme Regis, was without doubt the stonechat, a very familiar object on nearly every furze-covered common.

Fyfield, Abingdon. W. H. WARNER.

TO CORRESPONDENTS.

C. R.—Bog Asphodel (*Narthecium ossifragum*).

A. P.—*Crataegus Azarolus* apparently, but the specimens are not very satisfactory.

C. M.—It is the common Ruby-tailed Wasp (*Chrysis ignita*), parasitic in the nests of solitary Hymenoptera. Please read Rule 4.

C. R.—A. *Thymus Serpyllum*, small form. B. *Thesium linophyllum*.

W. C. B.—*Linum catharticum*.

S. P. H.—That is the name the plant is known by in London gardens.

A. B.—Please read Rule 1.

A. L. D.—Please read Rule 4.

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 18, West Square, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Donations to Selborne Library.—The Librarian acknowledges with thanks the receipt of a copy of the Rev. J. G. Wood's edition of Gilbert White's "Natural History of Selborne" (Routledge), from F. W. Ashley, Esq., F.Z.S.; also "British and Foreign Birds," from H. Ravenshaw, Esq.

Lantern Slides.—The Council is desirous of forming a collection of lantern slides on natural history subjects, suitable for the illustration of Selbornian lectures during the coming winter, and which they would be prepared to lend to members who are able and willing to lecture on behalf of the Society. Members and friends are invited to contribute towards this object. The Secretary will be glad to hear from the Hon. Secretaries of Branches who will require lecturers during the session.

New Leaflet.—In order to assist Hon. Secretaries in the formation and carrying on of new branches, a leaflet has been prepared by Mr. E. A. Martin, F.G.S., and approved by the Council, entitled "How to start a Branch of the Selborne Society." It is now ready for distribution to those requiring it, and applications for copies should be made to the Secretary, Selborne Society, 20, Hanover Square, W.

Field Club Saturday Rambles.—

September 5.—Upper Warlingham to Coulsdon and Farthing Downs. (Victoria, 2.35; East Croydon, 3; Upper Warlingham, 3.17; London Bridge, 2.25, change at East Croydon). Tea near Coulsdon Station, same place as on July 4.

September 12.—Meet at Hanwell Station on arrival of 3.12 train (Paddington, 2.50; Willesden, 2.52; Ealing Broadway, 3.6). Thence through the fields to Greenford and Northolt. Guide Mr. H. Ravenshaw.

September 19.—Meet at Hampstead Heath Station (Victoria, 2.24; Willesden, 2.52; Broad Street. 2.40). Tea at Gate House Hotel, Highgate. Guide, Mr. G. K. Gude, F.Z.S.

September 26.—Meet at Loughton Station on arrival of 2 o'clock train from Liverpool Street. Thence by field-path to "King's Head" Chigwell, where take tea at about 5.30. Day tickets, 1s. Guide, Mr. Wattson.

October 3.—Bromley, to Hayes and Keston Commons. Croydon contingent take train at Addiscombe Road (S.E.R.) 2.23. Elmer's End arr. 2.29, dep. 2.38; Hayes, 2.50. London contingent; Charing Cross, 1.45; London Bridge, 1.58 or 2.21; change at Elmer's End. Any coming by 2.21 train kindly notify Mr. Martin.

A Fungus Foray is under arrangement for the middle of October, in conjunction with the Lambeth Field Club. Further particulars will be announced next month.

Council and Committee Meetings.—The next meetings of the Council will be held on September 3 and October 1, at 5.30; and of the Magazine and Leaflet Committee on September 17 and October 15, at 5.30.

NEWS FROM THE BRANCHES.

Abinger and Shere.—A very enjoyable ramble took place in connection with this Branch on August 22, and was attended by a large number of members, children from the schools, and other friends of the Branch. During the ramble a visit was paid to Lord Farrer's grounds, the rockery, laid out apparently in imitation of that at Kew Gardens, being very greatly admired. Tea was kindly provided by the Hon. Sec., Miss Forster, of West Hackhurst, at her residence, after which an address was given on various local, botanical, and geological points of interest.

EDWARD A. MARTIN, F.G.S.
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

No. 82. OCTOBER, 1896. Vol. VII.

A WORD OR TWO WITH INSECT-COLLECTORS.

THE appearance of a new book* especially addressed to "the young collector," affords an opportunity for uttering a protest which has, perhaps, been too long delayed. The book itself does not require a lengthy notice; it deals exclusively with the collecting, rearing and preservation of British butterflies and moths, which appears to be the author's idea of entomology. The instructions—which are not very well written—are comprised in twelve chapters, according to the months of the year, and to each is added a list of some of the principal Lepidoptera to be looked for during the month. But although the reader is advised to make his own apparatus, and encouraged to rear and collect his own specimens in ways which will exercise his patience and ingenuity, we cannot but think that it is a pity to multiply books which encourage collecting. There has been a vast increase in the number of popular books on British butterflies and moths, most of which contain sufficient instructions on collecting; and although we would encourage observers, it is quite time that the wholesale formation of collections should be discouraged as much as possible. Butterflies were still so plentiful in England thirty or forty years ago, that Stainton could say that most were only local, not really rare. Many species, then locally common, are now on the verge of extinction as British, owing to a variety of causes, among which we may enumerate high farming, the Wild Birds' Protection Act, possibly, to some extent, unfavourable climatic influences, and last, but not least, reckless and indiscriminate collecting.

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* *Entomological Notes for the Young Collector.* By William A. Morley, pp. x., 129. London: Elliot Stock.

It is quite time for naturalists to impress upon the "young collector" (often a sinner in this respect, rather from inexperience than from intention), that it is a crime to destroy a single specimen more than he absolutely requires. In future we hope to see this lesson insisted on as of the first importance in every new book that issues from the press, or we shall soon reduce the number of species of British Lepidoptera to the level of those of Iceland or Greenland. In justice, however, to Mr. Morley, we must allow that he speaks very strongly on this point. Selbornians will be glad to have his good advice transcribed. We have made a few excisions in the passage, as the author's style is somewhat diffuse.

I want to say a few words about catching butterflies and moths. These lovely insects have been given to us by an all-wise Creator for our enjoyment and admiration, but it is not right that we should pursue these creatures merely for the sake of capturing them, killing them, and when tired of looking at them, throwing them away. As soon as you have captured the insect, examine it well; if it be not one of the sort you require, let the pretty creature fly away; or if it should be an insect that you want, but which is by no means uncommon, and it should be damaged or worn in any way, release it at once. Had this practice been invariably adopted, there is very good reason for believing that many British Lepidoptera now thought to be extinct would not have become so, and that others which are now extremely rare in their occurrence would have been more plentiful. There is another point, equally important to the beginner, it is this: If at any time he is searching in a good well known district for certain butterflies or moths, and comes across a large number of a certain good specimen [species ?], let him be satisfied with taking only a fair number (he will know how many his box will hold)* of that which he has discovered in plenty.

Many years ago I was travelling in the New Forest and came upon a young man bent on the same errand as myself. Among all true entomologists there is a kind of freemasonry which is very agreeable, and much useful and interesting information may be given when brother entomologists meet. I stopped and spoke a few words, and asked him if he had had good luck, and so forth, when to my surprise, he told me that he had suddenly come upon a spot in which *L. quadra* (the four-spotted footman) were swarming, and that he himself had taken several hundreds of the insects. I bade him a hasty adieu, but before parting gave him, in as gentlemanly way as I could, a piece of my mind upon the gross wantonness of his act. Selfish persons such as he are not thorough sportsmen, and do not care a straw if the species becomes rare, so long as they have plenty of the specimens. All I can say to such is that they are not entomologists in any sense of the word.

We may cite further warnings, and additional evidence for their necessity, from Mr. J. W. Tutt's recent book on British Butterflies. Speaking of the Heath Fritillary (*Melitæa Athalia*) he says:—

It is restricted to a few English counties, of which Kent, perhaps, was the chief, but collectors have utterly exterminated it in many parts of that county. We have seen as many as twelve or fifteen collectors from Dartford, Erith, and various parts of London, working against one another in a piece of ground not more than fifty yards square, in which this species formerly abounded in Chattenden Woods; snapping up every individual, good, bad, or indifferent, till not a specimen was to be found, and repeating the operation (only with a partially fresh contingent of collectors) every day, whilst the species lasted. From 1871-5 the species was in thousands in these woods; from 1875-80 it was scarce, and

[* We do not think he need be encouraged to take as many as "his box will hold."—W. F. K.]

since then it has been much the same in the Canterbury district. Abbot's Wood, in Sussex, is now the nearest locality to London, and there are some collectors who have scarcely missed going there when this species is out, for the last twelve or twenty years, and bringing away hundreds of specimens every year, and then they report, with surprise, that the species is much rarer than formerly.

The Purple Emperor is equally a victim to the exterminator.

The grand flight of this species, and the comparative difficulty of obtaining it, has made *A. Iris* eagerly sought after by collectors of insects, and the species has been practically exterminated in many places where it was abundant less than thirty years ago. In the "seventies" *A. Iris* was *the* insect of Chattenden Woods. The sallows form such dense thickets, that the larva could not be beaten, and hence the capture of the imago was the only means of obtaining it. These (both males and females) had a custom of flying for a few hours (11 a.m. to 3 p.m.) to the highest point of the wood, and soaring round a few oaks that topped the hill. Here they settled, and became an easy prey. With a large ring net fixed on the end of a long hop-pole about twelve or fourteen feet in length, we have seen as many as nine amateur collectors standing in a line at three or four yards' distance, and netting every specimen as it came up. Usually the numbers of "amateurs" were increased by a professional from Dartford, and another from Lewisham. Between 1877 and 1885, one of these professionals and a collector who was a near neighbour, practically lived on the ground; in one year (1881) alone, some two or three hundred specimens were captured. Such are the depths to which entomology has been reduced. Needless to say, the insect is practically extinct in these woods.

We are glad to see that this matter is receiving the attention of the Entomological Society. At a recent meeting of that body Mr. McLachlan opened a discussion on the best means of preventing the extinction of British butterflies. He named certain sure species which had already disappeared, and others which would probably become extinct in the near future, and expressed a desire to see whether some plan could not be devised to protect narrowly localised species which were apparently in danger of being exterminated by over-collecting. Professor Meldola thought that a resolution passed by the Society, possibly in conjunction with kindred societies, might produce some effect; and it was moved that a committee should be appointed by the Council to investigate the matter and to report thereon. If anything can be done the Selborne Society will, we are sure, be glad to lend every help possible in a matter so intimately connected with its objects and sympathies.

W. F. Kirby.

Tit's Nest in a Mop.—The cutting enclosed is from the *Ulverston Advertiser* of July 4, 1896. I cannot recall a similar instance, but these birds are occasionally very erratic in their choice of a building place:—

"Peculiar Place for a Bird's Nest.—We have heard many wonderful stories about birds' nests built in strange places, and one which has for the past few days been seen in Ulverston is one of the strangest. Mrs. Nicholson, who resides at the lodge at Fair View, Mr. Kennedy's residence, one evening left in the yard, close to the back door and the coal heap, a mop leaning against the wall. Next morning a tit was busily engaged constructing upon the head of the mop a nest of moss. The mop was not disturbed, and the little creature laid five eggs, and has now brought forth four youngsters, all cosily chirruping in their strange birth-place. Mrs. Nicholson takes the utmost care that the family shall not be disturbed, and has noticed that the little mother is not troubled unless strangers are seen in the yard."

Ulverston. S. L. P.

A VICARAGE GARDEN IN NORTH LANCASHIRE.

PERHAPS a simple description of some of the more noticeable features of a vicarage garden on the skirts of the lake district may have its attraction for the readers of NATURE NOTES. Imagine, then, a modest-looking garden of about an acre, consisting of mingled lawns, shrubberies, and unconventional flower-beds and rockeries, with a lively little stream in one place gathered into an ornamental piece of water, surrounding on all sides an old-fashioned irregular-gabled vicarage. There are many pleasant undulations and windings following the course of the stream, which runs the whole length of this very unusual kind of garden. There is no formal planting anywhere. It is a garden which, as an artist once remarked, seems to have grown after its own fancy, and had all its own way. There are several lawns very varied in their character, and none of any extent, and shrubs and clumps of trees with uncultivated bits, all containing one or more plants of exceptional interest, and forming miniature landscapes. In a word, the remark has been very often made that there is a peculiar fascination about this rustic botanic garden seldom experienced elsewhere.

One would often feel disposed to think that flowers are endowed with some natural sense of enjoyment and of a happy prosperity, whenever they find themselves in a spot that visibly suits them. Here they continually sow themselves and run wild with evident enjoyment, seeking out and taking possession of every favourable spot. How else should it happen that a score of indigenous flowers grow, increase and multiply in wild profusion in my garden as, within my experience, they seldom grow elsewhere? I have not planted, for instance, more than a few osmundas, yet these fine plants have sprung up uninvited wherever they are pleased to select a new home, and some of them attain a height of nearly five feet. The impatiens, transplanted from the neighbouring Duddon, the woodruff from the copses, the shining crane's bill, and a white-flowered Herb Robert from Wordsworth's Rydal garden, have grown up in many places, forming a rich background or a thick carpet, or clothing the walls with beautiful *Sedum album*, and many other sedums and saxifrages, just where they seem most welcome. So with the dusky crane's bill, the *Geranium sanguineum*, and others too numerous to mention, but quite at home in the vicarage garden. Sometimes varieties of ferns, of the origin of which in this locality I have not an idea, have suddenly greeted my eyes; as the "*Polystichum diviso-lobatum acutum*," a very handsome plant, has appeared at the back of a shrubbery, of which no history can be traced. Indeed, polystichums of many species and varieties abound and multiply freely. A singular example of this riotous enjoyment of plant-life has occurred in the case of *Urtica*

pilulifera, the Roman nettle, a by no means common species, which I found in a Sussex kitchen garden and sowed some seed, with the result that I have one plant of this handsome nettle, four feet six in height, and spreading with many branches over a yard, the original plant being only three or four inches high. It is a very venomous nettle, and probably I shall not encourage it to spread. A great profusion of the Welsh poppy (*Meconopsis cambrica*) spreads far too freely. The scarce *Scrophularia vernalis* has naturalized itself here. One year an extraordinary crop of very fine double-flowered *Cardamine pratensis* suddenly appeared, covering a small damp lawn, and it has enamelled that spot every spring ever since. Cowslips and oxlips were introduced years ago, and now require no cultivation; so also with the true Cheddar pink kindly sent me by a Selbornian friend.

In the same garden are several rare trees. Two tall fine tulip-trees (*Liriodendron tulipifera*) rear their shining green masses, covered with their handsome flowers of rich yellow and green, during two or three summer months. Owners of gardens and pleasure grounds should plant this noble tree more frequently, if not for themselves, at any rate with the hope that their grandchildren may gather these rare flowers, for they only bloom when about forty years old. A young maiden-hair tree (*Salisburia adiantifolia*) is now six feet high, and promises to be a full grown tree some day, having sent out six new branches this summer. Spiræas of many kinds, but especially the very beautiful *S. ariæfolia*, are a great ornament to the garden. The spindle tree, a native of our woods, is covered in late autumn with its rose-coloured berries. The curious *Rosa Carolina* has grown out of an old wall in my garden for a great many years.

I will only add that if any Selbornian friends should happen to wish for such of these plants as I have mentioned as may be propagated easily, I shall be very happy to communicate some of the pleasure I have had myself.

F. A. Malleson.

Vicarage, Broughton-in-Furness.

Do Insects Grow?—The Rev. J. G. Wood, in his *The Brook and its Banks*, states very decidedly that they do *not*, but in reading White's *Selborne* I come across the following:—"After the servants are gone to bed, the kitchen hearth swarms with minute crickets, not so large as fleas, which must have been lately hatched," &c., &c. If crickets are insects, which I fancy they are, what is the explanation of this seeming contradiction?

Rose Turle.

[The apparent discrepancy is easily explained. Insects never grow after attaining their complete development; but in insects with *complete* metamorphoses this means after developing their wings when they have quitted the pupa-case; but in the case of crickets, and other insects with *incomplete* metamorphoses, the insects differ little in their various stages, except that after each moult they increase in size; after the last but one, they develop wing-cases, and after the last they develop wings. No insect grows after the last moult, though the *ephemeri* do moult for the last time after acquiring wings. Where insects pass through a series of moults, like the crickets, they may be said to grow; but even then, they only increase in size after each moult.—W. F. K.]

BIRD-SONG.*

THE song of birds has always been a favourite study with field-ornithologists; but for the most part they have been content to study the songs as they are now —to learn the love-song, the call and alarm notes, and to notice variations in the song of individual birds in one place, and the variations in songs which many birds are found to sing in widely separated localities. The habit of imitation, the generic, and, in some cases, the family resemblance in songs and notes (as for instance in the thrushes, buntings, crows, gulls, plovers and other waders) and the season of singing, have all occupied our attention, and must be familiar subjects to most observers of birds. The exceptions to one of these general rules, too, *e.g.*, in the resemblance of the songs of the wagtails to that of the swallow rather than to those of their near relations the pipits, of some finches to that of the buntings, and of a bunting to that of the finches, have interested us. But in the work now before us Mr. Witchell goes much further, and inquires how birds got their notes in the first instance. Here he breaks new, or almost new, ground; but it is hardly correct to say that while the geographical distribution of birds has been carefully recorded in all parts of the United Kingdom, their manners and various cries have hardly been noticed. Those who are acquainted with ornithological literature, even superficially, will not agree with this.

"The scheme of this work is as follows:—A hypothesis on the first occurrence of voice in any animal is stated, and the influence of combat in perpetuating it is then mentioned. The inherited distress cries of young animals (probably produced long after the occurrence of the voice in adults), and the retention of these cries for the purposes of call-notes, lead to the consideration of the simplest songs, which are mere repetitions of the call-notes, and to those in which variations occur, and which probably are affected by the influence of imitation. The purposes of imitation are then discussed. The scientific value of the notes of birds, as bearing upon the ancestry of species, is considered at length."

The author has given years to the collection of facts in the field, and, subsequently, much study to the writings of others, and has brought together an enormous mass of information upon a subject which he has made his own; as he is careful to point out in the Preface, however novel or otherwise may be the theories stated in this book, he can at least claim that, so far as he is concerned, they are absolutely original. The book should be widely read, for although they may not agree with the author

* *The Evolution of Bird-Song.* With Observations on the Influence of Heredity and Imitation. By Charles A. Witchell; pp. x., 253. (London: A. and C. Black, 1896.) Price 5s.

on all points, ornithologists cannot fail to find in it much that is of great interest, and much that will suggest to them lines of study and observation unthought of before, which will greatly increase their interest in the observation of the habits of birds.

The *Evolution of Bird-Song* is essentially a book of these modern days, when, not content with the exterior appearance of things as they are, we are striving to look at their insides; not content to ask only "is it," but asking "why is it." The subject is so new that we are hardly in a position at present to criticise the theories contained in the book; and time must be given for the weighing of many of the facts.

The author divides the subject into ten chapters, treating of the Origin of the Voice; Alarm Notes; The Influence of Combat; The Call-Note; The Simplest Songs; Noticeable Incidents connected with Bird-Song; The Influence of Heredity in the perpetuation of the Cries of Birds; Variation in Bird-Voices, its Causes and Effects; The Influence of Imitation in relation to Bird-Song; The Music of Bird-Song. In his Conclusion the author urges the ease with which this study may be pursued, and that observers will arrive at the conviction that his conclusions are justified.

Although we may not all be possessed of the author's untiring patience, the perusal of the book will doubtless lead many into this field for observation, and we may hope to see the subject more fully ventilated. Mr. Witchell is a musician, and in the course of his pages gives many bird-notes and phases in musical score. The appendix contains the score of the music of the blackbird, thrush and skylark; and there is a bibliography of the subject (hardly complete), and an index.

The author has not relied wholly upon his own observations, but has "quoted those of numerous well-known authorities." He cannot very well be expected to have ascertained the truth or otherwise of all these quotations, but our experience of the bird in a wild state convinces us that the description of the song of the ortolan bunting quoted at p. 121 is entirely wrong and misleading. Anyone who knows the volume and pitch of the ear-piercing cries uttered by the oven-bird will find it difficult to believe that young birds, "when only a day or two old, utter the full cries or songs" of their parents (p. 88). And it may be added that the song of the water pipit (p. 118) is not like that of the tree pipit, if that is the meaning of a somewhat ambiguous passage. Although there is a general similarity between the songs of several species of pipits, the songs vary very considerably in merit, and it seems to us misleading to say that "the common tree pipit and meadow pipit have somewhat similar voices," when that of the former is immeasurably superior to that of the latter. The quotation from Yarrell as to the alleged similarity of the song of the rock pipit to that of the two birds just mentioned was not worth insertion, as the song of the rock pipit is quite distinct from that of the two other species.

Mr. Witchell has taken great pains, and lays before us much that is of the greatest value. Whether all his statements and quotations are worth anything must be left to individual readers to decide. For ourselves we are far from satisfied with the following, for instance: "The inferences deducible [p. 95] from their resemblance" (*i.e.*, the resemblance between a particular note of the starling and a cry uttered by the redwing when migrating) "are strengthened by a physical analogy between the starling and the *Turdidæ*, the fact that the young of the former are brown when first fledged." "The buntings (*Emberizidæ*) appear to be allied to the pipits by their notes; in some species by the possession of a rather long hind claw, and other features." In this connection (p. 120) the author quotes from Yarrell the late Mr. Proctor's observation that the snow bunting will rise up in the air and sing sweetly, with wings and tail spread like a tree pipit. But surely this is not intended as a proof of the alliance of the buntings and the pipits? The blue-throated warbler has the same habit for that matter. "The buntings [p. 121] are, at any rate, much more allied by voice to the pipits than are the finches, which are often placed nearer to them." "The snow bunting [p. 124] sings like a pipit, and the plumage of this species is somewhat like that of the shore-lark."

Much as we appreciate *The Evolution of Bird-Song* we cannot help thinking that some of its theories are a little in danger of being overstrained. For instance, in chapter ix. the author, in treating of resemblances to sounds produced by the elements, writes: "Many of the warbling birds, such as the black-cap, wren, robin, blackbird, thrush and willow-warbler, like to build their nests not far from water . . . . and in these situations they are often within hearing of some boisterous, or musical little cataract, whose persistent notes may fairly be expected to influence the future songs of nestlings reared in the neighbouring shade." Now, if this were true, should we not find that the particular races of these birds nesting in western England, where the streams are musical, would sing a different song from the birds reared in the flat parts of England, where the waters are still and sluggish?

The book is well and clearly printed, and very pleasant to read in tnat respect.

O. V. Aplin.

"OSPREYS" AGAIN.

THE cruelty involved in procuring the feathers of egrets called "ospreys" by milliners, has been often exposed. Finding that many humane ladies were this year wearing such plumes, especially the cheap kind called "brush osprey," under the belief that their plumes were artificial, I determined to find out the truth as far as I could. Mrs. Lemon, Hon. Sec. of the Society for the Protection of Birds, has also made searching inquiries and experiments, and the result is we have found innumerable cases of real egret and heron plumes systematically sold as "artificial osprey."

Two years ago a first-class milliner in Regent Street sold me one which I was told was vegetable; but on looking at it carefully at home I had doubts. My brother, Mr. Francis Darwin, had it examined by a Cambridge ornithologist, who told told me the very species of egret off whose back it came. This year I bought six specimens of these "brush ospreys" from important and well-known shops in St. Paul's Churchyard, Kensington High Street, Edgware Road, Oxford Street, and Wigmore Street, at prices varying from 6¾d. to 4s. In every case an assurance was given that these ospreys were artificial, and therefore that there could be no cruelty; although as to one the assistant informed me that many of their ladies objected to wearing ospreys on grounds of humanity, and that then they always sold them the "brush" ones which were "not cruel"—why, she did not know, for she believed they did come from part of the same feather. These six samples were sent to Sir William Flower, Director of the Natural History Museum, for examination, and he assures me that with the exception of one, which is principally made up of two dyed and curled bird-of-paradise feathers, "all are real 'egret' feathers, *i.e.*, the plumes which grow only in the breeding season on the back of one or other of the small species of white heron, commonly called 'egret,' and which for some unaccountable reason have generally been called in the feather trade 'osprey,' though the bird that really owns that name, a fish-hawk, produces no ornamental plumes. The statement that these feathers are artificial is an entire fabrication, intended to salve the consciences of those who wear and sell them."

They are, no doubt, extremely beautiful, and have an airy grace which cannot be surpassed; but the price which must be paid for them, as they only appear during the breeding season, and are the nuptial plumes of these birds, is the death by starvation of the young ones.

Mr. Scott, a well-known American ornithologist, describes,* with much detail and great vividness their breeding places in

* See vol. xii. (1887), of *The Auk, Quarterly Journal of Ornithology*, published in New York.

South Florida, and the devastation which has gone on unchecked except by the extinction of the different species. One hunter told him he had been able to get over 400 plume birds in less than four days. For every such plume three to four young birds have died a miserable death by starvation. The aggregate of animal suffering thus caused is very great. And to show the scale on which the traffic was conducted, Mr. Scott mentions that one trader alone employed annually forty to sixty gunners. But the islands in Florida which once had "a perfect cloud of birds" hovering over them all day long during the spring and summer months are now deserted, owing to the extinction there of these beautiful birds; the scenes of slaughter are chiefly going on, as I am told by Professor Newton, in India and the East. But somewhere it must be proceeding more briskly than ever, for never have these plumes been so almost universally worn, or sold at such low prices.

I cannot but think that if the women of England, who are foremost in the world in their care for their dumb brethren, could be made to realize the miserable scene, the festering heap of dead bodies of the parent birds with their plumes wrenched off, and the dying cries of the helpless young ones in the nests around, they would gladly agree to give up wearing an ornament produced at such a cost.

The question of the extinction of many beautiful and interesting forms of life is quite a different one. All naturalists deplore the certain result of this unfortunate fashion, and it is difficult to speak calmly of the pity of it all. Would that the wearers of these plumes would reflect over the irreparable damage which is being committed for a motive that no one can seriously think sufficient.

R. B. LITCHFIELD.

OUR RIVER.*

IT is two years since we noticed Mr. G. D. Leslie's *Letters to Marco*,† and no one can be surprised that the reception accorded to that delightful volume induced its author to produce another of the same kind. There is indeed this difference—that these "Riverside Letters" were penned with the intention that they should afterwards appear in print, whereas the former series were written with no such intention; but otherwise they may be regarded, as their author styles them, "a continuation of *Letters to Marco*."

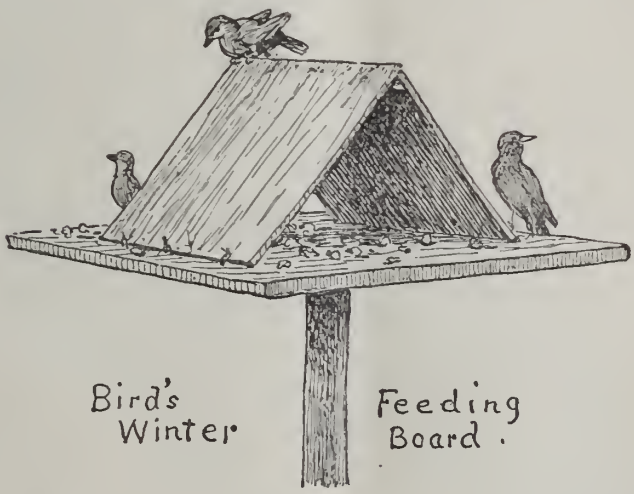
* *Riverside Letters.* By George D. Leslie, R.A. (Macmillan & Co. Price 7s. 6d.)

† NATURE NOTES, 1894, p. 129.

As in the earlier book, there is no attempt at arrangement or connection; things are written down just as they come, with a straightforward simplicity which lends an additional charm to the many interesting facts that are scattered up and down the pages. Mr. Leslie's artistic perception has enriched the book with many illustrations; those who saw the Royal Academy exhibition this year will not have failed to notice his glowing picture of the Thames' side near Wallingford, where his lot is happily cast. Our readers will be glad to have the illustration of a bird's feeding-board, as evidencing Mr. Leslie's Selbornian instincts:—

"Feeding the birds," he says, under the date of January 29, "is now a constant care; they empty the little storehouse on its long pole in no time, and it has to be replenished several times a day. I have the greatest difficulty," he continues,

in preventing the sparrows, rooks, and starlings from getting pretty nearly all I put out. The thrushes and blackbirds fare very badly; the thrushes will persist in keeping on the ground; they do not alight on to the feeding-board, but creep about, and, as it were, "stalk" their food stealthily and deliberately, in consequence of which the other more alert birds snatch it away from under their very beaks. As to the blackbirds, they waste the best part of their time in fighting and chasing away each other and the smaller birds. I am quite at a loss to know how to manage the stuff so that these two sorts should get their proper share.



We have before expressed our wonder that folk who write books of this kind do not revise the spelling of the plant-names or get some one else to do so. *Oenothera tarraxiflora*, *Œ. fructicosa*, *Philodelphum grandiflora*, *Aster ericordia*, and the like, disfigure the volume; and what is the "Japan quince, sometimes called *Camelia japonica*"? Certainly not *Pyrus japonica*, for that is described elsewhere; and certainly not a *Camellia*. These, of

course, are small matters, but they might just as well be right as wrong, and it would be quite easy to make them so.

As a good example of the observations which abound all through the book, we may quote the following account of the proceedings of a nuthatch, of which, by the courtesy of the publishers, we are enabled to give the accompanying illustration:—

In the kitchen garden there is a large weeping-willow overhanging the river, near which at sundry times I have heard a tapping noise, but never could find out what caused it. I did not expect to see a nuthatch there, as, most usually, I see these birds in the sycamore or walnut tree at the other end of the garden. This afternoon, as I was dipping water from the river beneath the willow, I heard a noise just over my head. I stepped back gently, and there, very close indeed, on the slanting trunk of the tree, I saw the bird and its nut as plainly as possible. The willow bark is deeply corrugated with narrow furrows, into the angle of one of which the bird had thrust the nut (one of our filberts), and was perched above

it, holding on firmly by its claws. It drew itself up almost to a slope backwards, and, with rigid body and neck, came down on the nut with its beak with machine-like accuracy. Every now and then it would go round and give a tap or two from below, apparently for the purpose of the adjustment of the nut; but the main work was done from above. The bird remained some time whilst I was there, hard at work, but flew away at last, leaving its nut unfinished.

Two things I derived from this observation: first that the bird had chosen this

tree on account of the character of its bark and of its sloping trunk, which made the retention of the nut in its place an easy matter; and secondly, as this was the 30th of May, the nut must have come from a store, probably hidden somewhere by the bird, for of course the nut must have been a last year's nut. As I have heard this tapping at different times all through the winter and spring, the store of nuts must have been pretty large to have lasted until now.

It would be easy to multiply quotations from this delightful book, but we shall do a greater kindness to our readers by recommending them to obtain it for themselves.

UN-NATURAL HISTORY.

A CORRESPONDENT is anxious to know what Miss Marie Corelli means by "bog-oak," and what by "the white lilies of St. John." We should not have the presumption to say what Miss Corelli means, so we wrote and asked her if she would kindly enlighten our readers. The application was, however, unsuccessful; Miss Corelli, although she is not, as was stated in the papers, entertaining a party of lady grouse-shooters, is taking a holiday in Scotland, and can hardly be expected to find time to satisfy what she probably regards as idle--if not impertinent—curiosity.

Bog-oak, of course, generally means the wood of oak preserved in a black state in peat bogs; but that is not Miss Corelli's bog-oak. That grows in Devonshire in a garden at Comb-martin, where "the wild growth of sweetbriar, myrtle, fuchsia, and bog-oak spring up everywhere in the erratic yet always artistic fashion of mother Nature, when she is left to design her own woodland ways." What can it be? The name does not appear in the *Dictionary of English Plant Names*, and we have never met with it elsewhere. The "lilies of St. John" are, we presume, the common white lily, though we do not know this as an English name for them.

It is in *The Mighty Atom*—a work which is understood to advocate religious education, and is now in its seventy-third thousand—that bog-oak presents itself; and a cursory inspection of the book leads us to the conclusion that the natural history of Comb-martin is as remarkable as its dialect. The birds, among which the nightingale predominates, are no common songsters, who "do but sing because they must"; no, they alight on window-sills and "pipe a gentle roundelay for the cheering and encouragement of those within, before so much as preening a feather"; they "come to assure" small boys who are learning their lessons, "that fine weather may be expected," and "seem disappointed that their gay carol is not more appreciated." Then they "peer round at the youthful student from time to time inquisitively, as much as to say, 'What wonder is this?

The rain is over,—the air is fresh,—the flowers are fragrant,—there is light in the sky,—all the world of Nature is glad and rejoices,—yet here is a living creature shut up with a book which surely God never had the making of! and his face is wan, and his eyes are sad, and he seems not to know the meaning of joy!'" Never, surely, did birds talk before in so happy a combination of Ollendorff and eloquence.

Well, perhaps we must not expect accuracy from a novelist; but what are we to say when we find so careful and admirable a writer as Mrs. Meynell talking about "hawthorn pods"?* The word pod has a sufficiently definite meaning, but how does it apply to the fruit of the hawthorn, and why should it be so applied, when the word "haws" is so familiar? In the same article, Mrs. Meynell enumerates among "quite wild things, untilled at all, gathered together in districts acres large," the "osiers for the harvest of the basket-weaver." Does she really think that osiers are "quite wild things," and that they need no cultivation? The incapacities of farmers' wives, as recorded by Mrs. Meynell, have already met with indignant disclaimers from representatives of the class attacked. Is it too much to hope that if this essay be gathered into her next slim volume, the gifted author may be induced to recognize that osiers do not grow wild, and to substitute "haws" for "hawthorn pods."

It must be confessed, however, that slips of this kind occur even in papers which might be supposed to be better informed. Thus the *Gipsy Journal*—the discontinuance of which we note with regret—lately referred, in its "Gilbertian Guild" notes, to the "catkins" of the sycamore (*Acer Pseudoplatanus*). Now catkin is a term of perfectly definite application, and is confined not only by botanists, but in popular parlance, to a form of inflorescence common to certain trees, of which the sycamore is not one. Why, then, should the word be wrested from its proper meaning, and bestowed upon an inflorescence to which it cannot in any accurate sense apply?

Perhaps the hope is unreasonable, and yet we cannot help wishing that popular writers, be they novelists, essayists, or scientists, would take a little more trouble to be correct in details of this kind. They might, perhaps, write a little less, but what their readers lost in quantity they would gain in quality, while the authors themselves would obtain a reputation for accuracy which at present they can hardly claim to possess.

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* *Daily Chronicle*, August 22.

THE SCENERY OF SWITZERLAND.*

Sir John Lubbock is a man of many occupations and attainments, and to the members of the Selborne Society is as well known for his numerous contributions towards the popularization of Natural Science as for the important post which he fills as its President. In his recently published volume he has presented us with an interesting discussion of an attractive subject. We all have an intense admiration for the grandeur of the Alps, but few of us who take our pastime therein bestow a thought upon the way in which the mountains came into being and were hewn into their present shapes; how the lakes were formed, and why the rivers took their present courses. We are too apt to take it all for granted, and, by our lack of appreciation, to allow a rich series of object-lessons in physical geography and geology to be passed over unnoticed.

It is here that Sir John Lubbock comes to our aid, and, assuming the part of guide, philosopher, and friend, opens our eyes to the splendid opportunities which we have neglected. He has digested a mass of native and foreign literature bearing upon the subject, and given us the mature opinions of the most competent authorities. He has spent much time in travelling up and down the land observing the facts for himself and pondering over the many problems presented, thus qualifying himself for the task of laying the whole matter before the British public. The results of his work are given to us in a book which is adapted for a wide class of readers.

The earlier chapters are concerned with a general discussion of the main features of the country, and of the work accomplished by the forces of nature, with a copious citation of alpine examples of the phenomena under consideration. Thus we learn the origin and history of mountain, valley, and lake; we read of rivers, glaciers and their work, and a host of allied matters. Of the later chapters each treats of a special district, *e.g.*, the Jura, the Bernese Oberland, the Engadine; and these will be of great use to tourists who seek to interpret the meaning of the geological features of the districts in question. The final chapter sums up the geological history of Switzerland, which, in brief, is that the Alps are due to the shrinkage of the earth and the consequent wrinkling of its crust; that their origin was recent—not older than that of our London clay; that they probably occupy the site of a far more ancient range; that their river system appears to have undergone some astonishing changes, *e.g.*, at one time the Rhone and the Rhine drained into the Danube, and so into the Black Sea; later on they found a northward exit, *viâ* Basle, and, joining the Thames, flowed out between Scotland and Norway, and finally the Rhone, carving its way westwards into the Saone, established its present course to the Mediterranean. The lakes arose from a variety of causes, but the origin of the larger lakes is still a disputed question.

All who would reap the full benefit of this attractive volume would do well to take it with them to Switzerland and study *in situ* the phenomena described. They will find much food for reflection, and will add to their travelling experiences a new and unfailing source of interest. The book is well printed and contains 154 illustrations, many of which show us the extremely rough handling that the Alps have undergone. At the end will be found a bibliographical appendix and a useful coloured map, but the want of an index is a serious inconvenience to the reader. For when you have become interested in the book owing to the attractive manner in which the subject is presented, it frequently happens that some passage reminds you of something similar in an earlier chapter, or the occurrence of some place-name recalls a previous mention of that place as connected with some phenomenon which you cannot call to mind. To make certain you turn over page after page in search of the former reference, but the chances are that you either entirely fail to find it, or only succeed after a long hunt.

A. G.

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* *The Scenery of Switzerland and the Causes to which it is due.* By Sir John Lubbock, Bart., M.P., &c. London: Macmillan & Co., 1896. Price 6s.

SHORT NOTICES OF BOOKS.

Mr. Hart Merriam's *Synopsis of the Weasels of North America.*—This is a further instalment of the excellent synopsis of the North American Fauna, now being prepared by the U.S. Government. It includes the one ferret (*Putorius nigripes*, the North American representative of our polecat) and all the weasels yet discovered in North America, north of Panama, numbering twenty-two species and subspecies, of which eleven are here described for the first time. Especial attention is paid to cranial characters and figures of crania. Again we have to admire the thoroughness of the work, to criticise which one would have to be a specialist; and in this instance we particularly call attention to the drawing of the heads of *Putorius frenatus* and *P. nigripes* in the frontispiece, so beautifully reproduced by the Heliotype Printing Company, Boston.

O. V. A.

All who enjoy a good walk in the country and are constrained by the exigencies of business or residence to confine their peregrinations to the neighbourhood of London, will view with anticipations of pleasure the appearance of another series of *Field Path Rambles*, by Mr. Walker Miles [*Round Epsom*, R. E. Taylor & Son, 19, Old Street, E.C. Price 6d.] The routes selected are described with Mr. Miles's customary skill and accuracy; they guide us over breezy, open downs and commons, through shady copses and by flowering hedgerows, and show us all that is best worth visiting in the district that lies between Mitcham and Leatherhead, Oxshott and Merstham.

A. G.

NATURAL HISTORY NOTES AND QUERIES.

Owls—Vipers.—I have received a pamphlet entitled "Traps and Trapping, by "Cornishman," and the following extract from it regarding owls will be pleasant reading for Selbornians, coming as it does from a professional trapper. He says:—"Owls—well, I never trapped but one, and I am not going to say how for the information of those who don't know, because they are great friends of mine. But why? The proverbial woman's answer will do—'Because they are': but I will go further and say that the owl is not a poacher, barring perhaps a very young rabbit for the brood. Even this is an event that rarely occurs; but I fancy I hear someone say, what of young partridges and pheasants? Well, what of them? When the owl is about these are under their mother's wing, in blissful ignorance of all danger, present or future. I have three or four around my house, in the buildings; they nest there, and I have studied their ways, and on my observation and former experience I base my opinion."

Concerning vipers, what is said will interest those who have doubts about the young ones jumping down their parent's throats to avoid danger. It is this:—"Some years ago I heard a dog I had with me barking, and was just in time to see something in the mouth of a viper; there was about one inch visible. I went for a stone, threw it, cutting the viper nearly in two, about three inches from the head, and to my astonishment three or four little vipers came out, and, as all the surroundings were as bare as a billiard ball, with the instinct of a boy I cut a stick, to see if the little ones would bite it, as they were quite nippy with their tongues when I began to stir them. I soon realised what I had seen in the viper's mouth at first, for finding the stick not to their liking, they went into their mother's mouth one after another, and into the stomach; then I pressed them out, and the performance was repeated. I then finished them off. I of course told my father, who replied, "Oh, did you not know that before?"

Slapton, Kingsbridge. GILES A. DAUBENY.

Nightjar (pp. 176, 197).—There are plenty of nightjars in the fir-woods on this part of the Normandy coast, and I am able to inform your correspondent,

F.R., that I have heard their charming note just before daybreak. Also, I have heard them once or twice in the daytime in Claverton Woods, near Bath.

Ste. Marguerite sur mer, Seine Inférieure. EMILY SPENDER.

Nightjar and Chiffchaff (p. 197).—The variation in the song of the chiff-chaff noted by me on the above page should stand thus, "feet-feet, chiff-chaff, chiff-chaff."

Fyfield, Abingdon. W. H. WARNER.

Gratitude in Birds.—A few days ago I was calling upon a lady at this seaside watering-place, when she related to me the following anecdote. She said she was leaving Paris, in July last, for her home here, where she resides during the summer months, when, just as she was about to enter the train, she felt something fall softly on her head, and, putting up her hand, she felt there was a little bird entangled in her hair. It had either fallen, accidentally, out of its nest, from the roof of the station, or it had made an unsuccessful attempt to fly when it was not quite fully fledged. The kind lady at once released the little intruder (which proved to be a hen sparrow) from her hair; and, on entering the railway carriage, she commenced to feed it with bread crumbs from her mouth. So far from resisting this, the little bird fully appreciated this mark of delicate attention, and whenever it wanted feeding afterwards it appealed to its kind "mama"—by opening its mouth and flapping its tiny wings—for nourishment, which was quickly supplied to it. It was brought safely to England, and is now comfortably housed in a pretty little cage in the lady's boudoir. Whenever "mama" enters the room, the little bird flies excitedly against the bars of its cage with joy at seeing its kind benefactress; and whenever the cage door is opened, which it is occasionally, to let the little fellow enjoy a "fly out" (care being first taken that there are no windows open, or cats or dogs near at hand), it makes straight for its benefactress and alights on her shoulder. The friendship which has sprung up between the two is very pretty to behold, and the unmistakable gratitude of the little bird to its kind protectress, as expressed by a simple chirp, is really very touching.

St. Leonards. C. H.

About a Spider.—On June 30 last I noticed a small spider on the dinner table. I carried him on my napkin to the open window and shook him off on the sill. He took a short turn round and immediately began to climb up into the air. Trying to see if there was any floating line above him, I put my lens too close and disturbed him, and he fell to the ledge again from a height of about six inches. Then I watched him closely. As before, he ran round a small area—½ inch or so across—apparently anchoring his line at three or more points. Then he started climbing again. He rose at an angle of about 60°, and finally reached the edge of the "reveal" at a distance of fully two feet from his starting point. At about two inches from the end of his journey he wavered about considerably, giving one the impression that the line above him was still free and floating about. Then (I suppose) the line caught the edge of the brick-work and he ran up at once. It is not likely that there was any connection between him and the brick-work when he started climbing, for he had been carried a distance of eight feet from the table to the window, and knocked smartly off a rolled-up napkin. Still it would be satisfactory to learn that some-one else has witnessed a similar feat. The place was in shade, and my eyes were not good enough to detect any line either above or below him. The spider was almost black, glossy, and with a narrow body barely ⅛ inch long. *Ergatis latens*, ♂, pl. ix. fig. 95b in Blackwall's *Spiders* (Ray Soc., 1861), is not unlike it.

Bromley, Kent. J. J. SCARGILL.

Sympathy in a Bird.—"One touch of nature makes the whole world kin" is a well-known phrase as regards mankind, but it was only a short time ago that I learnt that this is also applicable to the feathered tribe. I was taught this by hearing a little robin singing for four long hours together before its shadow in a looking-glass, mistaking it for another bird, and hoping it would respond to its song. Some one first heard it singing about eleven o'clock in the morning, in an unused room at the back of the house where I was staying. We went down to see it, and there was the little thing perched on the stand of the glass singing out its soul in fullest song to attract the attention of its own

reflection! Occasionally it would perch on the top and look behind and round the edges of the glass; it was encouraged by hearing another robin in a tree outside the window answering to it, and I think this added to the deception of the shadow bird being a reality. It was so absorbed that it allowed several of us at a time to go into the room to watch it, and hardly moved away when I placed a few crumbs on the table for its dinner; it ate a little, but did not attempt, as I had hoped, to feed its little friend in the glass. I noticed that when the bird in the tree stopped singing, the note of the bird inside would become more plaintive, but directly one of us began to whistle like the robin, its song would again be full and joyous, as if doing all in its power to gain the attention and sympathy of its supposed little companion.

Clifton. M. T. STURGE.

[We hope the sympathetic songster was not challenging his shadow to combat!—ED. *N.N.*]

Toad and Snake (p. 197).—Mr. Milligan, writing of an incident which he witnessed, and for which he secured a dramatic ending, states that two questions arose which he cannot answer. May I suggest a theory to which he may find a reply, and favour us with it, in all seriousness. Why did he kill the snake? It was a harmless grass snake, a most beautiful creature; he was in search of a dinner in that fashion which has been allocated to him. Why should he have sentence of death carried out upon him in the exercise of his functions? He would have swallowed the toad right enough if he had been left alone (by the way it was more probably a frog than a toad); the toad had quite recently been swallowing a live slug, and it is doubtful if Mr. Milligan would have killed the toad to free the slug, had he disturbed the toad at dinner instead of the snake.

This is a question which Selbornains must carefully answer for themselves—have we any right to interfere with the rights of animals in such fashion? I think not. We kill animals for our own food, why should we interfere with them in the same function? To kill animals in self-defence, such as the tiger, who may wish to prey upon us, is a matter of the struggle for existence, in which the question will, of course, be answered by the survival of the fittest; but to kill a harmless snake who had just sat down to dinner, and because of that, does not seem to me right.

Birmingham. LAWSON TAIT.

[The question propounded by Dr. Lawson Tait, in his second paragraph deserves serious consideration; we entirely endorse the view he expresses.—ED. *N.N.*]

Is it possible that the yellow creature mentioned by Mr. Milligan was a frog and not a toad? Its "hurried leaps" look like it. And, if this is the case, the "squealing" corroborates my experience as to the vocal powers of yellow frogs. On the two or three occasions when I have heard a frog crying out like a young puppy (one was being attacked by a dog and one by a cat, when its appealing attitude was very curious) I invariably found the frog brilliantly yellow. There can, I suppose, be no doubt that these yellow specimens of *Rana temporaria* are not to be recognised as a variety; and yet there seems some unexplained correlation between colour and voice. Some of your correspondents may have heard an olive-coloured frog yelping; I never have.

Kew. E. HUBBARD.

[Another correspondent makes a similar suggestion.—ED. *N.N.*].

AN EDITORIAL GRUMBLE.

IN notifying to our readers our change of address—which is now 126, Kennington Park Road, London, S.E.—we will take the opportunity to call the attention of our numerous correspondents to the rules drawn up for their guidance as to the forwarding of communications. These rules are few, short, simple, and intelligible; yet no mouth passes in which each is not honoured by the breach as well as by the observance.

During the last month, for example, we have received two communications unauthenticated with name and address (see Rule 1).

On the 18th we received a contribution which the writer especially asked should be inserted in the present number (see Rule 3).

We have also received both communications for insertion and books for review from the Secretary of the Society, and from each of the three publishers who have at one time or another been associated with NATURE NOTES (see Rule 4).

Enquiries as to the supply of NATURE NOTES and one subscription (returned to the sender) have also been received (see Rule 5).

The neglect of the observance of these Rules means a waste of time, trouble, and temper, to many persons, which might easily be avoided if correspondents would take the very slight trouble involved in the observance of our Rules.

We wish it to be understood, therefore, that we shall not consider ourselves bound to acknowledge the letters of those who do not comply with the Rules we have laid down, and that such correspondents must not expect to find their communications attended to.

126, *Kennington Park Road, S.E.* THE EDITOR.

TO CORRESPONDENTS.

H. W. R.—Mealy Guelder Rose (*Viburnum opulus*).

A. B—(1) Red Eyebright (*Euphrasia Odontites*). (2) Eyebright (*Euphrasia officinalis*). (3) Lady's Mantle (*Alchemilla vulgaris*). (4) Wanting. (5) Burnet (*Sanguisorba officinalis*). You should get some elementary book on British plants.

M. E. M.—(1) Bistort (*Polygonum Bistorta*). (2) Clubmoss (*Lycopodium alpinum*). (3) *Festuca vivipara*. (4) Crowberry (*Empetrum ingrum*). You should send better specimens.

E. S.—*Ophion obscurus* (Ichneumonidæ).

F. E. P.—*Mespilus* (*cratægus*) *punctata*: it is not poisonous.

V. B.—Dr. Sharpe says: "It may be a twite, but a specimen must be sent for identification, as the locality is somewhat southerly for nesting."

A. P.—White Beam (*Pyrus Aria*).

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Winter Lecture Season.—Referring to the notice which appeared last month, the following is a list of lectures which the Council wishes to illustrate by means of slides:—

Insects and their Structure. Fertilization of Flowers. Migration of Birds. Structure of Plants. British Wild Flowers. Trees. Bird Life. Pond Life.

Offers of slides on loan, or for disposal, should be made to the Secretary, at 20, Hanover Square, W.

New Branches.—It is expected that several new Branches will be inaugurated during the autumn, and the Council wishes to take this opportunity of urging upon members the great desirability of opening up new districts by the formation of such Branches. The Secretary will willingly give all the information necessary for the accomplishment of this object, and it is hoped that no one will be deterred from such work from fear of the possible membership being but small. Even though such be the case, a Branch having once been formed will always serve as a nucleus around which Selbornians' interests will collect, and the smallest Branch will always bear the *prestige* which belongs to the Society as a whole. In country districts especially, it is not always easy, where the population is but sparingly distributed, to form a large Branch, and numerous small country Branches are as urgently needed as are those in towns where there is a possibility of greater expansion.

Council and Committee Meetings.—The next meetings of the Council will be held on October 1 and November 5 at 5.30; and of the Magazine and Leaflet Committee on October 15 and November 19 at 5.30.

Field Club.—On Saturday, the 29th August last, the Field Club visited St. Albans. The party having been met at the Railway Station by J. Hopkinson, Esq., F.L.S., F.G.S., of "The Grange," St. Albans, was conducted to the Abbey and there joined by the Rev. G. H. P. Glossop, M.A., W. Page, Esq., F.S.A., and A. E. Gibbs, Esq., F.L.S., F.E.S. Mr. Glossop led the party round the Abbey, his remarks on its history and architecture, including the ingeniously atrocious restorations, being luminous and pointed. Mr. Page then delivered an interesting address in the Abbey churchyard, respecting some excavations he recently made on the spot, when he uncovered the foundations of St. Andrew's Church, built in the thirteenth century, but long since pulled down. The members then proceeded, under the guidance of Mr. Hopkinson, to "The Grange," where they were received by Mrs. Hopkinson, and entertained to tea. They were subsequently conducted to St. Michael's Church, where Francis Bacon lies buried, and thence to the ruins of the old Roman Wall, near Verulam Woods. The cordial thanks of the Field Club are due to Mr. Hopkinson for his great kindness in making all the arrangements in connection with this highly successful ramble.

Saturday Rambles—

October 3.—Hayes and Keston Commons. Croydon contingent take train at Addiscombe Road (S.E.R.) 2.23. Elmer's End arr. 2.29, dep. 2.38; Hayes, 2.50. London contingent; Charing Cross, 1.45; London Bridge, 1.58 or 2.21; change at Elmer's End. Any coming by 2.21 train will kindly notify Mr. Martin, at the Society's offices.

October 10.—Fungus Foray, in conjunction with the Lambeth Field Club. Wimbledon Common to Robin Hood Gate, where tea about 5.30. Waterloo (L. & S. W. R.), 2.25, 2.35, or 2.45, to Putney. Single fare, 5d.

Geological Lectures.—Notification has been received of a course of twelve lectures on the Geological History of Vertebrate Animals, which will be delivered by R. H. Traquair, M.D., LL.D., F.R.S., in the Lecture Theatre, South Kensington Museum, on Mondays, Wednesdays and Fridays, commencing October 5, at 5 p.m. Admission Free.

EDWARD A. MARTIN, F.G.S.
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

No. 83. NOVEMBER, 1896. Vol. VII.

THE PLEASURES OF RAMBLES.

WHOEVER wishes to acquire an exact knowledge of any district or country in which he may take an interest, will soon find that the very best of all means is to traverse it on foot. He may then walk as fast or as slow as he likes, ramble just as far as he likes, rest or ponder to observe when he likes, and altogether take his easeful delight in the best of all imaginable ways. Above all, he may leave the beaten highway, as he will be ready pretty soon to do, and ramble along those green lanes and fieldpaths which are, to a walker, some of the greatest of all the delights of our own delightful land, and in this way he finds out a world of information which he would never have learnt by any amount of riding, whether in vehicles or on horseback.

But beyond and above the pleasures of acquiring all this knowledge, are the many charms of the walks themselves. You ramble through English meadows, whose spring beauties of buttercups and daisies may well make you cease to think of the boasted glories of the tropics; past miles of hedgerows garlanded with hawthorn, and resounding with the songs of birds; beside many a pool that is the haunt of coot or hern; over purling brooks that display, all along them, willow-weed and mallow; and, as you look up, you may see the tower of some secluded village church towards which your path leads, or may hear therefrom the sweet sound of its bells pealing across the fields.

Almost as delightful as these are the green lanes. Many of them lead along some ancient route—such as the Icknield Way, which was the route from East Anglia across England—but are now traversed for miles by little more than some shepherd driving his flocks to a distant market; and they are usually

grassy and pleasant, unfrequented, bordered by high hedges, and often fitting in, as continuations, with the field-paths themselves.

England is surely the land of green lanes and fieldpaths; no other country can boast of anything like these. Our land is the land of fields and hedgerows, of paths and green lanes, and in whatever country we go, these will be sought for and sadly missed, by many who have wandered through them in our own delightful England.

An intelligent Englishwoman, bred among these country scenes of ours, had once to spend some years with her family in the United States of America, and she expressed her great disappointment at finding it utterly impossible to enjoy nature there as she used to do. There was, she said, so much nature, and yet no way of getting at it; no paths or by-ways, or stiles or foot-bridges; no provision for the pedestrian outside of the public road. One would think, she said, that the people had no feet and legs, or else did not know how to use them. Spending one summer season near a small rural village in the valley of the Connecticut, it seemed as if she had not been in the country; she could not come at the landscape, she could not reach a wood or a hill or a pretty nook anywhere without being a trespasser, or getting entangled in swamps or in fields of grass or grain, or having her course blocked by a high and difficult fence; there were no private ways, no grassy lanes, nobody walking in the fields or woods, nobody walking anywhere for pleasure, but everybody on horseback or in carriages. Stopping a mile from the village, she used every day to walk down to the post-office for her letters, but instead of a short and pleasant cut across the fields, as she would have had in England, she was obliged to take the highway and face the dust and the wind and the staring people in their carriages. She complained, too, of the absence of bird-songs; the fields and groves and orchards were quite silent compared with what she had been used to in England; the only noticeable sound everywhere was, she added, the shrill crescendo of the locust.

An enthusiastic American, in replying to this criticism, puts in a plea for the kingbird and the bobolink, as so full of music when they arrive, that he is loth to believe there is anything in England fuller or finer than their notes. But he admits very readily that as walkers and lovers of rural scenes and pastimes, they do not by any means approach their British cousins, and he adds that it is a seven days' wonder to see anybody walking in their country except as an exhibition and trial of endurance. This seems a regrettable taste on the part of our American cousins, as it certainly deprives them of one of the greatest pleasures that a lover of Nature in our own land can derive from rambles along green lanes and field-paths. Those only who know and love these rambles can be really said to know our country at all. Highways and roads go over it, indeed, in

all directions, but it is through these paths alone that we reach the heart of the land. We may often leave the high road altogether, and ramble for miles along these delightful paths, now walking through a field, now crossing a common, and now passing down some shady lane, and you may everywhere find something worth observing—the nest of a lark on the ground, of a thrush in a hedge, of a magpie in a bush, of a rook on a tree, of the whole of which you may almost know the contents without ever troubling the birds by looking in, and in this way you may get to know our country thoroughly, passing from village to village, through meadows and cornfields, past woods and over brooks, through farm-yard and rickbarton, while revelling everywhere in all the sights and sounds that make our land so enjoyable.

It is in the south of England, perhaps, in the districts of oldest settlement, that these green lanes and field-paths abound most; and it is in these that I have enjoyed them most myself. A footpath is a thing of slow growth, requiring a settled state of things, unchanging habits among the people, and long tenure of the land; the rill of life that finds its way there must have a perennial source, and flow there day by day on into the next century. We English are said to be a private, domestic, homely folk, who dislike publicity, dislike noise, and love to feel the grass under our feet. We have a love of field-paths and green lanes—the Americans humorously say we invented them—and they appear in much of our very sweetest poetry.

In America they do not take readily to such routes; they do not love lanes and the seclusion of the fields, as we do; they like to be upon the road, to plant their houses there, and to appear there mounted on a horse or seated in a carriage. The absence of lanes and field-paths is not, perhaps, so great a matter; but the decay of the simplicity of manners which that absence implies is certainly a thing to be regretted.

It is not the walking merely, it is the keeping yourself in tune for a walk, in the condition in which you can find, in so simple and natural a pastime, both exhilaration and enjoyment, that the delight comes from. When the exercise of your limbs affords pleasure, and the play of your senses upon the various objects and shows of Nature quickens and stimulates your spirit, your relation to the world is simple and direct, as it should always be. The mood in which you set out for a ramble is one in which your best thoughts and impulses come to you. Life is sweet in such moods, and we should do all we can to cultivate their production, and invite their return.

After having been familiar with rambles by green lanes and field-paths, I was, at one period of my life, transferred from the south to the north of England, where I lived for many years in the West Riding of Yorkshire, on the slopes of what the natives call "the backbone of England." For awhile I thought I had got into a land of utter desolation. There were no field-

paths, hardly any fields, and no hedges; none of the things in which I had all my life taken delight; and I seemed to be everywhere surrounded by tall chimneys, stone walls, the unfragrant factory-oil and the busy din of machinery. However, the first thing that reassured me was to find, as I soon did, that I had got into a land of song. The second night I spent there I was awakened in the "wee short hours ayont the twal," by what I thought at first were angels singing round my bed; but on looking out into the clear moonlight I saw that these awakeners were a band of well-dressed people singing in a little front garden, a short way off, in perfect time and tune, and with fine expression, the glee "Hail, smiling morn."

And on the first long walk that I took, I stood to listen with pleasure to a gay group that were singing very sweetly among the heather some hymns about welcoming the pilgrims of the night, and a day's march nearer home; and this was, I learnt, a wedding party of Ranters, out for the day, and spending the holiday in this delightful way in the heather. My respect for the people began to increase, and in this regard it never ceased to do so. For, though I found that they were, in general, not very easily moved, and very undemonstrative, yet in the matter of music and song they rose to ecstasy—put their whole heart into it—and thus could not fail to raise any lover of music to an ecstasy of delight along with them. Once when I went to a concert, to a reserved place, I seemed conscious of a rather peculiar smell near me, of which, for awhile, I could not find the cause, till by and by my neighbour, a man in dress that seemed better than my own, told me quite confidentially, after some fine piece of music, that these were his "mates," and that he had but just time to get out of the dye-house and put on his coat to come there; thus the effluvium was explained as that of the dye-house. As the concert went on, my friend got more and more excited; as Wordsworth said—

> "Could he keep himself still if he would? No, not he,
> The music stirred in him like wind in a tree."

He would turn to me and say "Eh! but that's grand!" and at last I saw the tears pouring down his cheeks; yet this was but a choir and band from one of the mills, and they had been discoursing the music of Wagner, then made known to me for the first time.

One got, by degrees, to love the people; what music-lover could help it? And then I got to love their land, which was, I found, of the type of those "honest grey hills," heather-clad, which Scott told a complainer, Washington Irving, that he loved to get back to, and could not live without seeing at least once a year.

You are there among dales hardly a bit inferior to those of Cumberland and Westmoreland, and beside some of the very finest rock-scenery in England. Across the middle of the

district runs a great displacement of the mountain-limestone that forms one of the most magnificent faults, as the geologists term them, in England: and to this we owe the cliffs of Malham, from the foot of which the Aire leaps forth as a full-grown river, the scar of Gordale, and the striking and picturesque scenery of Craven. Though the limestone hills show little heather, they are mostly covered by a fine turf which is excellent for walking on, and where we lose the limestone capping, and get upon the millstone grit, we may walk over heathlands that are truly delightful to traverse, provided you get to know their many soft places, and carefully avoid them. In the limestone region you find the caves and pots by which it is pierced, or you may ramble beside some pleasant stream which suddenly vanishes into the bowels of the earth, and leaves you to walk over its bed, where stones show clearly that in wet seasons a full and potent river rushes powerfully by.

Where I used to walk by lane and field, I had now to ramble by scenes like these, over moorland; and where, beforetime, a walk of ten miles would suffice, I used to ramble thirty miles, which I seemed to do, in this bracing air, with equal ease and greater delight. Though I regretted the absence of those banks

> "whereon the wild thyme blows;
> Where oxlips and the nodding violet grows,"

I found, in other sights and other scenery, an abundant recompense. Though Ingleborough and Penyghent were very fair heights, there were, within my range of walks, no mountains, yet the colour of these hills and moorlands, in some of their moods, were truly superb; never elsewhere have I seen such an approach to what Wordsworth calls,—

> "The gleam,
> The light that never was on sea or land,
> The consecration and the poet's dream."

Now and then there would be disclosed scenes of unsurpassable loveliness. On one sweet Whit Monday, walking out of broad sunshine, I had to take refuge from a severe snow shower, and this I did under a superb overhanging limestone cliff, from the very foot of which there gushed forth a full grown and very beautiful river. Therefrom I walked to the top of Penyghent, while the landscape still retained the slowly diminishing white mantle, in which she looked, to my eye, a picture of unforgettable beauty. Then, as an equivalent for Shakespeare's banks of thyme and violets, I got by degrees to know how to descend into deep recesses, where brooks that sprung from hill-top springs had worn out channels, along the very beds of which one could ramble, leaping from stone to stone, and looking up through a vista of hazel, bramble and willow, wherefrom would trickle or drip little streamlets that made the whole a perfect paradise of ferns. Save the royal fern—sacred, I thought, to my

own Devonshire streams—every common fern luxuriated here, and their fronds drooped in on both sides. To such a spot I once took a native, who thought his shire did not anywhere contain so lovely a scene, and forthwith spoke of getting up a picnic party to visit it, with myself as guide! Just above it there had been unearthed a Roman station, the Cambodunum that had stood midway between Eboracum and Mancunium.

W. J. C. Miller.

(To be concluded.)

IN MEMORY OF MUNGO.

THE life of my little wayward, amusing, lovable Mungo, the Ichneumon, has come to an end, and it surprises me to discover what a blank is left in mine. For five years the mongoose has been part of our household, constantly in sight, basking in the sun on a wool mat in summer, or on the rug before a blazing fire in winter. However sound asleep the little animal might appear to be, he was always furtively on the watch for a disengaged lap, and would come and meekly sit up on end like a spaniel entreating to be taken up and nursed. If he failed in this project, then he would secretly creep under a dress skirt and lie there *perdu*, so that when she rose, the owner of the skirt would be startled to find his solid body hindering her progress. This habit was a very dangerous one, and had we not trained ourselves to rise cautiously, my friends and I could hardly have avoided often treading upon the little creature.

For the last six months Mungo has evinced a strong desire to live in a rabbit hole in the centre of a great clump of rhododendrons, and as I thought "camping out" might be good for him, his meals were placed within his reach, and he was allowed, as ever, to have his own way. One day, however, I found out that he swallowed his food with difficulty, and a close examination led to the discovery of a tumour in his throat, which must eventually have closed it up and caused a lingering death. The going away from us all was now accounted for, and I sorrowfully recognized the presence of that instinct which leads animals and birds to steal away to some quiet corner when they know that they are going to die.

There was no hope that an operation for the removal of the tumour could be of any use, since Mungo would have proved a hopelessly intractable patient. All I could do, therefore, was to coax him to come indoors again and watch over his meals with extra care, that his food might be of a kind that he could swallow without difficulty. Thus the little animal lived on for a month or two without apparent pain, until at last he could no longer swallow, and I knew it would be kinder to end his life

instantly than to allow him to die slowly of starvation. Those who have known the pang of losing some favourite animal, which may have been for years a cherished companion, will have some compassion for me in parting with Mungo. I could hardly nerve myself to give the fatal order, and I resolved that at any rate before doing so I would try and secure a life-like portrait of the pathetic little face of my much-loved pet. In this I happily succeeded.

I never possessed an animal that from first to last gave me such an amount of worry, vexation, and perplexity, and yet, even as a mother generally cares most for her naughtiest child, so Mungo's perversity seemed only to endear him to us all. The mongoose never could be made to understand, as a dog or cat would, that he had done wrong and ought to be ashamed of himself. He would pull over a choice vase of flowers, and, standing amid the ruins of the china, would look up with the most innocent expression imaginable; one could not be angry with such an irresponsible creature. I am glad now to remember that all Mungo's wicked little ways were patiently endured. If he had any crumpled rose-leaves in his life they were of his own making, and I like to think that at any rate I did my best to smooth them for him.

ELIZA BRIGHTWEN.

LONDON BIRDS.

THE pair of dabchicks which bred in Clissold Park, Stoke Newington, last year (see p. 98), returned this spring, but in spite of indomitable patience and energy on their part, extending over a period of several months, were unsuccessful in their nesting in consequence of the persecution they suffered from other aquatic birds. The daily observations by Park-sergeant Kimber and the writer, of what occurred, are so curious, that they may be deemed worthy of record.

The dabchicks first appeared in the middle of May, on the larger miniature lake, which, with the island upon it barely exceeds a couple of acres in extent. They at once commenced building and, as usual, constructed several false nests before finally settling down under the bank of the island.

Whilst these operations were in progress the male adopted a pugnacious attitude towards the water-fowl generally, whenever the latter approached; artfully diving under them and, unseen, pecking their feet. It was ludicrous in the extreme from time to time to watch the sudden affright of the ducks and even the stately swans at these, to them, inexplicable attacks, and to see their undignified retreat. Such tactics were of course only available in the deep water a few yards out. Further along

the edge of the bank, about twenty yards away, a pair of moorhens were located with a young brood around them. From the first these birds watched the dabchicks with jealous and aggressive eyes, and before the hen had sat for many hours, boldly bore down upon the nest, drove away its lawful occupants and deliberately tore it to pieces, which they were able to do with ease in the shallow depth. After a short interval the dabchicks repaired the damage and the hen recommenced sitting, the male assiduously feeding her meanwhile. Again and again, however, they were attacked by the moorhens and their little home ruthlessly destroyed. The park authorities had their attention called to the matter by Sergeant Kimber, and attempts were made by placing boards and wire netting to afford the dabchicks protection, but it was evident that their suspicions would not allow them to take advantage of this.

So a month went by, and the birds took up a fresh position and built another nest on the further side of the island. Here they were allowed to remain unmolested for nearly a week, during which time the moorhens had a second brood of their own to look after, but at the end of this period the latter renewed their attack and once more dismantled the nest. For several days afterwards the dabchicks hung disconsolately about, but at the commencement of July adopted an entirely new situation on some floating pieces of wood, moored out five or six yards from the side. Upon this frail structure they re-started building, although from the first much hampered by the swans, which are in the habit of mounting on the wood to preen their feathers.

It was hoped that their old enemies had ceased their relentless warfare, but on the 15th of the month, hostilities were resumed. The dabchicks in their new locality were better able to defend themselves, and a battle-royal, lasting for nearly half an hour, ensued, in which they fought desperately, dashing the water in volumes over their opponents and uttering piteous cries; but were eventually worsted and driven off. For some hours they disappeared altogether until dusk, when they once more took up their old quarters by the bank. There they finished, a week later, a fresh nest, much larger than the previous ones, but this was soon doomed to destruction, not by the moorhens, but by the swans, who simply devoured it. The unfortunate dabchicks thereupon returned to the floating wood, and built another nest, which met with the same fate as the last, being eaten by the swans. It should be mentioned that the nests were principally composed of edible green weed—believed to be *Conferva rivularis* (crow silk, or flannel weed)—which grows at the bottom of the lake, and is eagerly sought after by water-fowl as well as fish, roach especially. Later on the dabchicks renewed their efforts, but on every fresh attempt they were frustrated either by the moorhens or the swans. They were seen about the lake until early in September, and then departed altogether. From the reception they met with it is hardly probable that they will return another year.

At the end of May last a second pair of dabchicks—believed to be the young birds of 1895, came to the water and commenced building, but being also molested by the moorhens, soon quitted the spot. In July a bird of the present year appeared but did not remain long. During this month (October) a third pair has arrived and can be seen throughout the day, being unusually tame. Others have been noticed recently in the district, so that these interesting little birds would seem to be on the increase. The moorhens themselves raised three broods during the season, viz., May 14 (eight), July 2 (seven), and August 16 (five). On the advent of the second brood the old birds drove away the first. The latter were repeatedly observed feeding their young brethren; a fact regarding the species recorded many years ago by the late Bishop Stanley.

H. Chipperfield.

ON THE NATURE OF BARDOLPH.

BARDOLPH is a dog with a pedigree. From his mother, the beautiful "Calthorpe Ruby," he inherits some of the bluest blood in the fox terrier world, and his grandfather on the paternal side was that renowned "Desolation," whose valorous exploits against rats and other enemies of the race are no doubt favourite themes in many dog nurseries.

To Bardolph has descended something of his grandfather's spirit; but when he came to us, as a puppy of six months old, the sterner side of his nature was as yet undeveloped, and his timid shrinking manner deluded us into fearing that he was going to prove a little deficient in pluck. With us he was soon at home, but outside the garden gate he straightway became afflicted with as many whims and fancies as a fine town-bred lady. A cow was to him an object of the direst terror, and all big dogs he looked upon as his natural enemies. He would wriggle and squirm before them, or lie on his back with his legs in the air, and a most abject expression of countenance, as much as to say, "You see I am a *very* little dog, quite a worm in fact; pray be kind to me!" And the first time he saw a rabbit, I do not know which was the more frightened, the dog or the rabbit! Both fled in opposite directions, and one of them, at least, never stopped till he reached home!

But all this happened three months ago, and between then and now there is a great gulf fixed, which has received into its yawning depths a miscellaneous collection of articles—various half-masticated boots and shoes, a doll with its hair pulled out and its body eaten away, hats, aprons, &c., torn to shreds; to say nothing of sundry items of food, such as a leg of mutton stolen from the larder, cream cheeses (for which our friend has an

over-mastering passion), one tabby kitten and, alas! a swallow, which must have been very young on its wings to have allowed itself to be caught by such a clumsy four-footed animal as a dog.

It may be thought that this distressing catalogue reflects no great credit on the owners of the dog. But after sparing neither rod nor exhortation, they have at last come to the conclusion that, short of the sobering effect of time, there is *no* cure for pure animal spirits in either dog or man; and after all there is something very infectious in a vitality that occasionally overflows a little.

Sometimes as I wait for Bardolph on the outskirts of his favourite hunting-wood, and listen to his excited yelps, I do not feel at all sure that it is not *I* who am in the wrong to be "limply hanging over a gate, yearning for the impossible," when such glorious possibilities of happiness lie within rabbit holes only a few yards away from me; and when there comes a quick rustling in the bushes, and the animal for which I have been waiting rushes out—clay-coloured and panting with excitement—I have no longer any doubt in my mind, and I feel quite small and apologetic in the presence of so much energy.

It is very disappointing to have such limited sympathies, and that they *are* limited I realized the other day when the dog brought me his first rabbit. He watched me pick it up with eager excitement, and then his face changed and said as plainly as possible, "There now, I've taken all this trouble to bring you a rabbit, and you are so dull and apathetic you won't even exert yourself to play with it."

That he has our welfare very much at heart is shown by an attempt he has lately made to expurgate our literature. The daily papers have come to our hands with the police reports carefully gnawed away; and the other morning we came down to breakfast to find a rather nice edition of *Racine's Selected Works* scattered in little bits on the floor. We think he must have mistaken the very correct Racine for some other Frenchman—possibly Zola—but the intention is what we must look at and try to respect, though it is a little hard to see our library so roughly handled.

One last remark as to his name of Bardolph. To a casual observer nothing could be more unlike Shakespeare's "malmsey-nosed knave" than our keen, alert-looking terrier. But the one blemish to his very well-marked face is a small red spot on one nostril, and here lies his resemblance (and I hope the only one) to Falstaff's bibulous companion, of whom Prince Hal remarked that "His zeal doth burn in his nose."

MARY L. CONGREVE.

OF MOSSES.

WHATEVER diversity of opinion there may be about the value of the late harvest, it cannot be disputed that the present year is remarkable for its prolific yield of autumnal fungi, not only for the quantity and variety of species, but also for the gigantic size of some of the specimens. For this of course the wet, warm weather is responsible. However, it is not of the fungi that I would speak, but of another group of cryptogamic plants—the mosses. My reason for this is twofold—there is a new moss-book which claims the notice of Selbornians; and the season for gathering mosses has set in.

It is in the cool, damp weather of the winter months that these hardy plants thrive best. From September or October onwards till the next wave of summer heat comes to shrivel them with its dryness, or to thrust them out of evidence beneath a fresh overgrowth of more robust vegetation, these exquisite little creatures have a free arena in which they unfold their bright but meek existence, gladdening our eyes in a barren world, covering open woodland spaces and wayside banks with a velvet carpet, studding old walls and trunks of trees with living gems.

There may be Selbornians whose lot it is to spend the winter months in the country, and who through lack of occupation are apt to find their leisure time to hang heavily upon them. Should this be the case, I would venture to remind them that in the collection of mosses they may provide themselves with a hobby which is capable of affording great relief from the monotony of country life, and which may, in exceptional cases, develop into such an absorbing mania as to rob winter of all its terrors, nay, make it welcome as the season in which the ruling passion may be indulged. However, be that as it may, moss collecting is a soul-sustaining pursuit which may be recommended for the possession of sundry advantages of which the following are a few. It necessitates a good deal of out-door exercise, and supplies an object for one's walks. It trains the faculties of observation, reason, and memory; and develops a neatness and skilfulness of hand. While much time may be spent out of doors in the search for the best hunting grounds and the gathering of suitable specimens, there is room for much indoor work in the preparation, examination, and identification of the specimens collected. Though good work can be done in the field with a powerful pocket magnifier, it is only by the use of the microscope that the student can expect to make satisfactory progress. And it is only under the microscope that the full beauty of the moss-plant—the delicate tracery of the leaf tissue and the marvellous symmetry of the peristome—is revealed.

While the easiest way of beginning the study of mosses is to obtain personal instruction from an experienced friend, it is possible with a little patience and perseverance to get along with the help of books alone. And no better introduction could be wanted than Bagnall's *Handbook of Mosses* (Swan Sonnenschein, 1s.) which in a simple manner describes where and when the common species may be found, how to examine and preserve the specimens, and in fact is full of practical and useful hints on the subject. This, however, is not the new book mentioned above, of which a short account must now be given.

The Student's Handbook of British Mosses * is a work which has long been wanted and is indispensable to all collectors of mosses. While suited to the advanced worker, it is so written as to meet the requirements of the beginner. By a simplification of the technical language, by a short but lucid sketch of the structure of moss plants and the addition of an ample glossary, the subject is freed from its repellent difficulties, and is rendered easily intelligible. With the help of the admirable keys the identification of even barren specimens is made possible. This feature enables the student, as no other work has done, to surmount the initial difficulty which besets the beginner, viz., the absence of fruit in

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* *The Student's Handbook of British Mosses*, by H. N. Dixon, *with illustrations and keys to the Genera and Species* by the Rev. H. G. Jameson. Eastbourne: V. T. Sumfield. London: John Wheldon, 1896. Price 18s. 6d., pp. xlvi., 520; 60 plates.

some of the commonest and most obvious mosses; for the keys of other books, being chiefly based on characters of the fruit alone, are useless for the determination of barren plants. Further, the characters insisted upon in the keys are illustrated by the figures in the plates. The descriptions of genera and species are full; and Mr. Dixon's method of printing the salient characters in italics will be gladly welcomed for the readiness with which it shows the student how to distinguish plants that are nearly allied or that closely resemble one another. The descriptions are supplemented by judicious and helpful notes. Mr. Dixon's share of the work is entirely new, but Mr. Jameson's keys and plates have been before the public for some years in a separate form (see NATURE NOTES, 1893, p. 214), and have well stood the test of time. Mr. Jameson has had much experience with beginners and is thoroughly in sympathy with them, and well aware of their difficulties. It was with the view of banishing these difficulties that he devised the keys.

The study of British mosses, although it cannot be regarded as on a thoroughly sound basis until the completion of Braithwaite's *Moss-Flora* shall have put us in possession of all the ascertained facts of the distribution of the species in our islands, and of the entire synonymy, yet from the point of view of the beginner is on a satisfactory footing. And it may safely be recommended to all who have a taste for natural history as the best of winter pursuits. The plants abound everywhere, are easily collected, and readily preserved, and, owing to the facility with which by soaking they may be made to regain their original appearance, they can be put by for examination during the long winter evenings or on rainy days. They afford material for an intellectual occupation in a dreary season, when opportunities for scientific work are scarce; and also supply a means of recreation eminently fitted to refresh and divert the mind of the tired and careworn brain-worker.

A. GEPP.

WILD FLOWERS.*

THE first of these books is what it professes to be—a simple introduction to the study of plants. In a series of seventeen short lessons the beginner is led through a well-arranged course, embracing the most important facts relating to the external structure of a seed-plant and its members, and the functions of the latter. The language is somewhat technical at times, and too much stress is laid on mere form, such as variations in leaf outline or shape of roots: one is tempted to believe that the object is merely to make use of a number of certainly excellent figures which happen to be at the author's disposal. The matter is generally accurate; we must, however, take exception to the confusion of *bast* and *bark* in lesson vii. The introduction of simple experiments, and the suggestion of practical exercises are useful features. The student who, with the help of a capable teacher and ordinary intelligence, has worked systematically through the book, will have gained a very fair elementary knowledge of the parts of our commonest flowering plants and of the terms used in describing simple facts of morphology and physiology. And, what is also of great importance, he will be ready to go on without having much to unlearn. The book is well illustrated, the figures—all old friends—being the same as those used in the author's *Elementary Botany*.

Having mastered the elements of plant morphology, the student, or anyone else interested in plants, should find Mr. Henslow's book on British wild flowers a useful companion in his field-work. The introduction is very dry, but our imaginary botanist will already know most of the facts therein inculcated. He will, however, be bound to read it if he would use the artificial key to the orders

* *Botany for Beginners.* By Henry Edmonds, B.Sc. Longmans: 8vo, pp. 117, with 85 figs. Price 1s. 6d. *How to Study Wild Flowers.* By the Rev. G. Henslow, M.A., &c. Religious Tract Society: 8vo, pp. 224, with 57 figs. Price 2s. 6d.

and genera, which looks like a number of very hard sums in algebra; and, as in such cases, we think it would be nice to know the answer, or genus, before starting. Of course it is right and proper to insert those tables in our floras and the like, but we are convinced that the quickest way to sicken a person of botany is to give him a plant and a key. The bulk of the book is an admirable descriptive account of our commonest British plants. It is, in fact, a small flora, written in as interesting a style as is compatible with the largely-systematic form of treatment necessary. The introduction of points of interest in connection with fertilization, adaptation to environment, use to mankind, &c., help to relieve the more purely diagnostic parts. Some of the illustrations are excellent, others as poor. They seem to have been borrowed from two sources, one good and one bad; compare, for instance, fig. 4 on p. 62, which is as good as one would wish in such a book, with the miserable object on the next page. Happily, the good ones are in a very large majority, but they are not always rightly named. The arrangement of the orders and genera is that of Hooker's *Student's Flora*, but it would not have greatly impeded reference to that work to have removed the gymnosperms to the end of the series. In this year of grace 1896, their interpolation between dicotyledons and monocotyledons as gymnospermous dicotyledons augurs serious out-of-date-ness on the part of the author.

A. B. RENDLE.

BRITISH SLUGS AND SNAILS.*

ALL true Selbornians will of course admit a more or less passing interest in these creatures as part of the economy of nature: but few, if one may judge from the pages of NATURE NOTES, seem to have taken to the study of them. Possibly there is some excuse for this. Snails do not readily commend themselves as pets —especially in our gardens—and fancy patting a slug on the back! Nevertheless, apart from the interest that accrues in collecting their shells, there is a great deal to be done in the way of observation concerning their respective habits, life-histories, and food. It is quite astonishing how little in this line is known concerning them. Even so simple a matter as what they "eat, drink, and avoid" is comparatively unknown with respect to many, especially the smaller kinds.

Not every slug or snail is such a foe to the gardener as has been believed. Here possibly we arrive at the source of another hindrance to the would-be student —How are the different kinds to be distinguished, where are they to be sought for, and how treated when captured?

It was to meet difficulties of this sort that Mr. Adams's little book, now in its second edition, was written; and we think the present edition will be found all, or almost all, that the tyro can desire in the way of help to start him on his career. He will find in the introduction the necessary instructions how, when, and where to collect and preserve the shells, whilst the remaining portion of the work should guide him in discriminating, with the aid of the plates, the different species. And even though the names the author selects are not always those most usually employed by conchologists, the more correct ones can readily be found out afterwards. Nor is information wanting to the culinary curious as to how to cook and eat certain of the more succulent kinds. A glossary follows, in which the meanings of the Latin names and of the technical terms employed in the work are given—not always perhaps in a manner to satisfy the scrupulous philologist or an exacting classical scholar, but quite near enough for the purpose.

Appended are tables drawn up by Mr. W. Denison Roebuck, showing the distribution of the various species in the British Isles. So conscientious has this recorder been that he declines to include any species in the list for any district

* *The Collector's Manual of British Land and Freshwater Shells.* By Lionel Ernest Adams, B.A. Illustrated by G. W. Adams, A. Sich, and the Author. Second edition, pp. 214, 11 pls., 8vo. Leeds: Taylor Bros., 1896 [8s. plain, 10s. 6d. coloured].

unless a specimen has been sent him and duly verified. Here is a chance for snail-loving Selbornians: let them help to fill up the gaps! Some will be easy enough, for Mr. Roebuck has not yet seen a specimen of the common garden snail (*Helix aspersa*) from North Wiltshire, West Suffolk, or Radnorshire! Will none take pity on his almost judicial ignorance and send him a few? The common field slug, too, is missing from his tables for many localities in which it cannot fail to occur.

Finally, there are the plates. We are not able to say what the coloured ones are like in this edition, not having been favoured with a coloured copy, but if they are executed after the crude manner of those in the first edition, we say, save your money and buy a plain copy, since it is possible to recognize your shells by the uncoloured figures.

Whatever little shortcomings Mr. Adams's book may have, it will prove eminently useful to beginners, who by its aid will be able to advance to better things. Nor is its price absolutely prohibitive.

B. B. WOODWARD.

ANOTHER BIRD BOOK.*

THE idea and scope of this pocket volume is good; and large as is the number of books on British birds already before the public, a reliable handbook of a size which one could slip into one's pocket when visiting a collection, or bent on a short ornithological excursion, would certainly be useful. But to be useful it should be complete, and not be liable to fall short of exactly the piece of information that the searcher may be in need of. In the preface the author tells us that nearly all the species on the list of British birds have been described, but he has been hardly consistent in his choice of those thus treated. For instance, although the black-throated wheatear—a bird which has occurred only once in these islands—is described, the isabelline wheatear is not, although a very few words would have sufficed to point out the characteristics which distinguish it from the common wheatear; and it is just these points of information—to enable us to detect a rare stranger—which we require in a book of this kind. We are surprised to find such species as the ortolan, the bee eater, the roller, the goshawk, the lapwing, the eared grebe, the little gull and the ivory gull (of which "scarcely more than thirty examples have been obtained"), not to mention others, without a word of description. Indeed, the members of the order Gaviæ, as well as the game birds, have received very inadequate notice. It may be urged that space had to be considered. But surely space could have been better economized in other ways. It was not necessary to devote half a page, more or less, to a sketch of the life histories of such well-known species as the song thrush and blackbird, and such sentences as "The glad song, uttered while soaring upward, is well known," might well have been omitted from the account of the skylark in a concise handbook. It is hardly correct to say that the song of the blackbird is usually heard again during autumn, for the blackbird is among the rarest of autumn singers; nor do we think it is ever truly gregarious in winter. The sketches, if included at all, should be complete, but we have nothing about the well-known fact that the song thrush is migratory. Indeed, sketches of the habits of the birds seems to us quite out of place in a concise handbook, and beyond the scope of the work. A few words upon the distribution of each species, an indication of the season at which it is to be found with us, and a short description of its nest and eggs would amply suffice for the working ornithologist, who could more profitably read about the habits of the birds in larger works, where they are fully and adequately described. At all events, if inserted at all, the sketches should have been appended to all the species, as far as the known facts permitted, so as to supply the young ornithologist with information upon points with which he

* *A Concise Handbook of British Birds*, by H. Kirke Swann, fcap 8vo, pp. viii., 210. London: John Wheldon & Co., 1896. Price 3s. 6d.

was unacquainted; whereas we find here that only the best known birds are fully treated.

To revert for one moment to the black-throated wheatear, the author does not mention the eastern form of this bird (*S. melanoleuca*) which is regarded by some ornithologists, who are well able to give an opinion, as a good species, although, according to Seebohm who saw the bird (and the plate in the "Birds of Lancashire" bears him out) it was this form and not the western one which visited us. Dr. Sharpe however states the contrary. Where all the stages of plumage assumed by a species are not described, that in which it is usually met with in this country should be chosen for description. But opening the book at random (p. 180), we find the only plumage of the little stint alluded to is that of the adult in winter, in which stage the bird is rarer in England than in any other. The autumn dress of birds of the year, of the curlew sandpiper (p. 181), is not referred to, though ninety-nine out of a hundred of the examples shot in England are in this plumage. And it is incorrect to say that the knot (same page) in autumn very much resembles in colour the curlew sandpiper. The chief place should have been given to a description of the plumage of the young blue-throated warbler in the dress of the first autumn, and by the way, autumn and not winter should have been given as the usual season of its occurrence on our coast.

An appendix contains a list of species provisionally excluded, but why the Siberian thrush, more than some others found in the body of the work, should find a place in this, we are at loss to know. We cannot agree with an author, who, while fully appreciating the position of a sub-species, considers that *Anthus rupestris* "is undoubtedly a valid species," but we must commend his use of trinomials. Names of birds are given to them for our convenience, and it is obviously convenient to indicate by writing *Parus major*, *Parus ater* and *Parus ater britannicus*, the near relationship of the two latter forms; while it seems to us that to use only binomials in this case would be misleading. *Red*-necked pheasant (p. 161) must be a misprint. If, in noticing this little work, we have referred rather fully to what seem to us to be its failings, it is because we can see capabilities in the book, after revision in the manner indicated, of being much more useful than it is now.

O. V. Aplin.

SELBORNIANA.

Kew Gardens.—Can nothing be done to call forth an effectual protest against the spoliation of Kew Gardens? The work of destruction still goes on. Last week I found a magnificent oak tree felled near the azalea garden, and men busy with their axes in the adjoining wood. On my asking one of the men the purpose of all this, he replied that "improvements" were being carried on everywhere in the gardens. Too well do dwellers near London know that that fatal word "improvements" means nothing less than the ruin of natural beauty. Am I not right in supposing that the nation pays for the maintenance of Kew Gardens, and that therefore we have a right to protest against the destructive proclivities now manifested therein? E. S.

The *Daily Chronicle* says:—"Kew Gardens is nominally under the control of the Office of Works, but no one in that office seems willing to check the director. We do not doubt the eminence of Mr. Thiselton Dyer in his own branch of science, but he seems to be ridden by a very questionable theory in regard to landscape gardening. Apparently he has pronounced against all forms of tree-grouping. He is an ardent believer in the isolation of the individual tree—a sort of arboreal individualism. The effects of this theory, drastically applied, are daily becoming more evident. In every part of the garden ancient trees are being felled, and their stumps left as the only monuments of past glories. On what grounds Mr. Thiselton Dyer defends his action we do not know, but we strongly suspect that in the control of an ancient public trust like Kew Gardens any very definite theory is dangerous. Trees are easily destroyed, but they take generations to replace. The public taste is, after all, not a negligable factor in the case of a public garden, and the many protests that are heard on every side from

the lovers of Kew ought to make Mr. Dyer pause in his experiments. If not, perhaps the Office of Works had better look into the matter."

A Malvern Note.—I regret to hear that Lord Beauchamp has sold a beautiful old farm and homestead below West Malvern to the Dowager Lady Howard de Walden, and to see that she is making it hideous. Whilst her ladyship was buying up smaller holdings for her characteristically walled-in estate, I hoped his lordship would have stood firm. When the water works come to fill up the glens, and either inundate or remove a few more cottages, West Malvern will be spoilt, except for the wealthy who do not care for common beauty. In these matters are local Selbornians everywhere justifying their existence as protectors of pleasant places?

West Malvern. OSWALD BIRCHALL.

Feathers.—After all that has been published about the fashion of wearing wings, aigrettes and other feather ornaments, one may well be surprised to see them still in use, for ignorance cannot now be pleaded by the wearers. Still, it is some comfort to know that a very large proportion of these additions to bonnets and hats are made up of separate feathers of the peacock, ostrich, rook, and farm-yard fowl. The *example*, however, still remains, and is a bad one. Many ladies have given up all kinds of feathers for the sake of setting a good example, but many who still wear even the most objectionable kinds, have taken care to buy only manufactured wings, &c. It would be no great sacrifice to desist altogether, as the choice of other decorations is such a large one; tulles and laces, ribbons, flowers, leaves, fruit, fur, shells, beads; even delicate coralines and seaweeds might be worn with advantage, and would be something new and therefore delightful to the female mind.

ELIZABETH LECKY.

"Egrets."—It seems to follow that the killing of the egrets must be very false economy, and that the immense numbers of egrets' plumes sold must in a very great measure be those cast by the birds themselves after the breeding season. A lady missionary in China sent me a number of plumes which she herself had gathered from quantities shed by the egrets on the walls in China. I could have had as many as ever I wished, and they were then, and are now, in very good condition, though I have worn them some years, and they have never been *cleaned*. Surely these feathers must—by thousands, and possibly millions—be sold in the London shops.

EDITH C. STOCK.

Golf and Wild Flowers.—It is to be feared that the great and growing passion for golf is working unfavourably to the preservation of some of our most interesting wild flowers, especially on sandy sea shores, which are becoming so extensively utilized for links. A recent visit to St. Helen's Spit, at the east end of the Isle of Wight, well known as a habitat of uncommon seaside plants, showed that in the last few years the old area has been reduced to a fraction of its former extent, and is now almost confined to a narrow margin next the sea, while the rest has undergone a change to which the golfer and the botanist would give very different names. The same change has probably occurred in other places. Many Selbornians must be both golfers and botanists, and it is to be hoped that their influence will be exerted where necessary, that the old order (as old as Paradise) may not be entirely supplanted by the new.

B. WOODD SMITH.

Insect Collecting (p. 201).—All true naturalists must have hailed Mr. Kirby's article with joy, and everyone who has pursued the study of entomology can corroborate his statements. I have been a coleopterist from a very early age, and these are the principal discoveries I have made: first, that children begin to collect long before they can have any conception of the true purposes and methods of collecting; second, that parents are too ready to encourage this practice, since it "keeps them out of mischief"; third, that the puerile covetousness and avariciousness of adult collectors is very often simply amazing. Mr. Kirby has hit the right nail on the head; let us hope it will be driven home.

Cleveland, Yorks. GILBERT HUDSON.

The Humanitarian League and Sport.—With reference to the remark made by your contributor, "O. V. Aplin," in NATURE NOTES for September, that "if the members of the so-called Humanitarian League would sometimes read a book on Sporting, and try to know a little about what they talk of so glibly, they would find that sportsmen are not all uselessly cruel," permit me to say that we have never made any such absurd statement as that sportsmen are "all uselessly cruel." We have never denied that sportsmen are in many cases kind-hearted men; what we contend is that *the practice* is a cruel one, and would not be indulged in by humane persons if they seriously thought about it. That "O. V. Aplin" should recommend writers like Colonel Coulson, Lady Florence Dixie, and the Rev. J. Stratton, who are familiar with every detail of the sports discussed by them, to "sometimes read a book on sporting," is a bit of unintended humour, for which I thank him.

HENRY S. SALT.

79A, *Great Queen Street, W.C.* *Hon. Sec. Humanitarian League.*

NATURAL HISTORY NOTES AND QUERIES.

Ants.—My garden paths are paved with asphalte, or rather tarred gravel, and by dint of wear and tear and weather, have become cracked and seamed in various places, thus affording a dry retreat for the ants, which have developed in great numbers the past few years, until we are overrun with them. On Sunday afternoon, August 24 last, my attention was drawn to an extraordinary settlement of large winged ants. The lawn was covered with them, the paths — more especially in the neighbourhood of the then dry drains—were alive with them and the issuing streams of the common working ant, all in a state of the greatest turmoil and activity. The incident would not perhaps have been deemed worth record had it not been that a few day since I came across the following passage in White's *Selborne*, the accuracy of which, almost to the day, is corroborated:—

"August 23, 1771.—Every anthill about this time is in a strange hurry and confusion; and all the winged ants, agitated by some violent impulse, are leaving their homes, and, bent on emigration, swarm by myriads in the air, to the great emolument of the Hirundines, which fare luxuriously. Those that escape the swallows return no more to their nests, but, looking out for fresh settlements, lay a foundation for future colonies. All the females at this time are pregnant; the males that escape being eaten wander away and die."

"October 2.—Flying ants, male and female, usually swarm and migrate on hot sunny days in August and September, but this day a vast emigration took place in my garden, and myriads came forth, in appearance, from the drain which goes under the fruit wall; filling the air and the adjoining trees and shrubs with their numbers. The females were full of eggs. This late swarming is probably due to the backward, wet season. The day following, not one flying ant was to be seen."

I had imagined that the attraction for the descent of these winged ants in such numbers was the swarming colonies of the common working ants on my ground—in fact that it was an organised "Rape of the Formicæ." Else why was this simultaneous commotion between the two sorts? What relation exists between the workers and the winged ants? Can any of your contributors or readers enlighten me?

Thornton Heath. J. A. JAMES.

A Spider's Web.—Can any of your readers tell me if the following is an unusual occurrence? Early in September some friends of mine saw a garden spider (one with white marks on its back) make a web large enough to cover one pane of the dining-room window. It was a beautiful spider, and they watched it with interest during the day, but before dark they saw the spider swallow the whole of its web; taking a piece first from one side and then the other, the whole was devoured in five minutes; the spider departed and was not seen again. I have looked at two or three books, but find nothing of the kind mentioned.

K. L.

Kew Robins.—On returning to Kew Gardens, after an absence of four months, I went to visit the robins in the rhododendron walk (see p. 156). Three robins, my intimate friends in the earlier part of the year, at once responded to my call, and accepted the crumbs I offered them. From their tameness, I feel persuaded they recognised me, and I think the memory of these little creatures is worthy of note. By the by, a long experience of robins leads me to believe that the bird mentioned by your correspondent, M. T. Sturge, as attracted by his reflection in a looking-glass, was by no means actuated by sympathy with his supposed fellow-bird. However estimable robins may be in their conduct towards the human race, they have only envy, hatred and malice for their own kind.

EMILY SPENDER.

Frog, Toad and Snake (p. 218). The connection between the colour and the cry of the frog, mentioned by your correspondent, E. Hubbard, is surely this, that extreme fright makes all frogs turn yellow. A friend of mine, since dead, assured me that he had noticed that certain frogs distinctly changed their colour according to their surroundings, being, if I remember rightly, darker when they sat on a piece of floating wood, and paler in the water. Turning to the two smaller works on British reptiles, Miss Hopley's and Dr. Cooke's, I find that they both mention the same fact, the former from personal experience and in some detail; but there is room for further experiment in the matter, without the aid of snakes. I have only once seen a snake eating a toad, and imagine that it was by mistake; indeed I think it was trying to spit it out.

East Boldre, Southampton. J. E. KELSALL.

The Yelping Frog (p. 218).—The first and only time I ever heard one yelp was some years ago at Droitwich, in a market garden, where I was, in company with a baby and a black kitten, when a dark, olive-coloured frog appeared from beneath the leaves of a row of potatoes. The kitten looked upon him as a welcome playfellow, and made a dart at froggie, hitting him with her paw, whereupon he set up the most unearthly shrieking, hopping round and round in a circle at a great rate and taking high leaps. I never knew till then that a frog could shriek, and I do not know which was the most scared, the baby, the kitten, or myself.

MARY C. WALTON.

Vipers (p. 216).—It is a great pity that the "Cornishman" quoted by Mr. Daubeny did not promptly take or send the viper, whose young twice took refuge in her stomach, to the office of the *Field* newspaper. Not only might he have helped to settle a controversy long and keenly debated, but he would have earned the reward, still open, offered to any one who will produce a viper with the living young in the stomach. No one questions the existence of the belief; but the evidence produced has been in the great majority of cases second-hand; in other cases it has signally broken down.

F. M. MILLARD.

Un-natural History (p. 213).—Besides the curiosities given from Miss Corelli's *Mighty Atom*, there are two at least in *Thelma*, ed. of 1890, where larches are mistaken for pines, *e.g.*, "The tall pines stripped bare, every branch thick with snow," &c. (p. 454); "The wild north wind tore through the leafless branches of the pine-forests," &c. (p. 465). The scene is laid in Norway.

S. L. P.

Ichneumon Flies?—I was one day sitting under a fir tree, when my attention was attracted by the struggles of a large ichneumon fly with a fat green caterpillar on the gravel at my feet. The ichneumon walked round and round the caterpillar, seizing him by the throat and letting him go again; then flew about a bit in an excited manner, then attacked him again, dragging him a little way; then walked round him apparently feeling him, and fussed about in general for quite an appreciable time. The caterpillar meanwhile seemed quite rigid, but once when the ichneumon descended on him after a longer respite than usual he made a slight spasmodic movement, but otherwise was entirely passive. Finally, the ichneumon seized his prey and began, with his load in his jaws apparently, to walk towards the bank, some paces distant. He scrambled up some four feet, then went along the top of the bank and again, as if making for the crevices by

the paling, but no! he turned sharp round at right angles to the way he had come and made for the trunk of a fir tree, which, having reached, he proceeded to ascend, the caterpillar still in his jaws, never once having dropped it. He had climbed about three or four feet up when, load and all, he dropped right down to the ground! but picking himself and his prey up, he recommenced his ascent without any hesitation. The peremptory summons of the dinner bell cut short any further observations, so I should be glad to know more of the habits of these insects. Do they carry caterpillars home for their partners to lay eggs in, or would this be the female that I saw? and do they not use them alive for this purpose?

A. PEDDER.

[Mr. Kirby says: "The insect was not an ichneumon, but probably *Eumenes coarctata*, one of the solitary wasps, which provisions its nest with paralyzed caterpillars, and then deposits its eggs among them."—ED. *N.N.*]

Water-wagtails and Cuckoo.—I wrote to you some time ago about the not over common sight of water-wagtails feeding a cuckoo. This year the same birds nested over one of our bow windows, and again brought up a young cuckoo. By chance or destiny it fell out of the nest and was picked up by my sister. As I did not then know where the nest was I put it in a cage, and watched both its foster father and mother feed it there on the lawn for some hours. After keeping the young gourmand for some days we placed it in an old nest on the ground, thinking that it was then old enough to avoid cats and other enemies with its parents' help. It was fully fledged, and it soon left the place, and I hope by now is rejoicing in some sunny distant clime.

Partridges are perhaps not the easiest of birds to watch, but this year I saw one very pluckily chase a dog for some twenty yards up the road along which I was driving, my dog having innocently run into the middle of a covey which had wandered out into the drive.

Some friends of ours had a hen's nest out in a hedge, and when the young ones came out they caught them and took them into a yard. Two partridges were seen to come round that yard, and strange to say, when the chickens were let out one went off with the partridges, and has continued ever since with its foster parents. It comes in sometimes to be fed. It will be curious to see the sequel when it grows up. I trust it will not be shot by mistake.

Slaugham Park, Sussex. D. L. SECRETAN.

TO CORRESPONDENTS.

W. J.—(1) Apparently a seedling china-aster. (2) Wood's *Common Shells of the Seashore.*

H. W.—If you will read the passages again, you will see that neither of your suggestions is tenable.

M. P.—*Agaricus laccatus; Marasmius epichloe; Thelephora laciniata* (on whortleberry).

1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number: communications respecting this page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

OBITUARY.

At a special meeting of the Council, held on October 15, the following resolutions were passed:—"That this meeting wishes to place on record the great loss which Selbornian intcrests have sustained by the death of William Morris, one of the Vice-Presidents of the Society, and to express its condolence with his widow and family." "That a copy of this resolution be forwarded to Mrs. Morris."

Changes of Addresses. Important.—Members are requested, when notifying a change of address to the Secretary, to give their old address, and to state also the name of the Branch, if any, to which they belong. The omission of these details gives much unnecessary trouble, and delays the forwarding of the magazine.

New Junior Branch.—The Council hears with much pleasure of the probable formation of a new Junior Branch at Bromley (Kent). C. E. Hartley, Esq., of Quernmore, Bromley, Kent, has undertaken the duties of Honorary Secretary, and members and others interested in the formation of the Branch are requested to communicate with him.

Donation to Library.—Thé Librarian acknowledges with thanks the receipt of a copy of a "Naturalist's Diary," by C. Roberts, Esq., M.R.C.S., which has been presented by R. Marshman Wattson, Esq.

Council and Committee Meetings.—The next meetings of the Council will be held on November 5 and December 3, at 5.30; and of the Magazine and Leaflet Committee on November 19 and December 17, at 5.30; at the offices of the Society.

New Leaflets.—Mrs. Litchfield's admirable article on "Ospreys," which appeared in the October number of NATURE NOTES, has been reprinted as a leaflet, and can now be obtained of the Secretary. Price 6d. per 100; postage extra.

Winter Lecture Season.—Hon. Secretaries of Branches who are now making up their programmes for the winter season are reminded that the following gentlemen have kindly consented to lecture on the Society's behalf, at a cost to the Branch of travelling or part-travelling expenses only.

List of Lecturers.—J. S. Cooke, Esq., F.L.S., F.G.S., 26, Avenue Road, Weymouth; Col. W. L. B. Coulson, Newbrough, Fourstones-on-Tyne; James Saunders, Esq., 119, Rothesay Road, Luton; Alfred P. Wire, Esq., M.C.I.S., 1, Seaton Villas, Birkbeck Road, Leytonstone.

NEWS FROM THE BRANCHES.

Clapton.—The first winter meeting of the Branch will be held on November 7, at Upland College, Benthall Road, Stoke Newington, at 7.45 p.m., and will take the form of a microscopical and sociable evening.

Croydon and Norwood.—The meetings of the Branch will be directed more particularly this winter to the education of the children in the cultivation of kindness, and the abstention from cruelty, to all living things. With this object in view, various lantern lectures will be delivered, and prizes given for the best written accounts of the lectures. The first lecture will be given on Thursday, November 5, at Seneca Hall, Thornton Heath.

Honorary Secretaries are requested to forward particulars of meetings held in connection with their respective Branches, not later than the mid-monthly meeting of the Committee, and also copies of any leaflets, &c., which they may issue.

EDWARD A. MARTIN, F.G.S.
Hon. Sec. Magazine and Leaflet Committee.

Nature Notes:
The Selborne Society's Magazine.

No. 84. DECEMBER, 1896. Vol. VII.

THE FALSEHOOD OF EXTREMES.

FROM time to time we receive communications calling our attention to some harrowing form of cruelty which is perpetrated on some race of the animal creation. In many cases there is unfortunately only too much ground for the complaint; and no one will accuse us of having failed to comment with suitable indignation upon the barbarities involved in the wearing of "ospreys" or "aigrettes," or in the preparation of sealskin. According to some, indeed, our shortcomings have lain in an opposite direction; one of our most valued correspondents, for example, has taken us severely to task for having criticized the wearing of "ospreys" by members of the Royal Family—on the old principle, apparently, that what is "flat blasphemy" in the ranks becomes but "a choleric word" when adopted by the officers.

We have, however, for some time felt the necessity of entering a protest against the unsubstantiated, and indeed inaccurate, paragraphs which appear from time to time in the daily press and elsewhere, and of saying a word upon the unauthenticated accounts which we receive from correspondents. No cause is advanced by exaggeration; and the aims of Selbornians are likely to be endangered by it.

An admirable illustration of this kind of thing in its most intense form is furnished by the sensational statement regarding horses and leeches, which appeared in a letter by Mrs. Hadden, published early in the year in the daily press, whence it was copied into the weekly papers, and so distributed broadcast throughout the English-speaking world. Briefly, it stated that worn-out horses were imported to Bordeaux, where they were driven into the swamps to be devoured by the leeches, which were cultivated there in large quantities for the French market.

A terrible account, in which no detail was spared, was given of the horrors of this traffic, and people were implored to see that their cast-off horses were not delivered to such a fate. It is only fair to say that Mrs. Hadden now tells us that she "inquired from several sources whether these ghastly horrors were true," and was "assured that they were;" and that when her horrible tale was published she "had several confirmatory letters": and it must not be forgotten that Mrs. Hadden has published (in *The Animals' Friend* for July, whence the above extracts are taken), the withdrawal of her statement, which runs as follows:—

It now appears, from inquiries made on the spot by the R.S.P.C.A., that the leech trade is practically *nil*. The trade was brisk in the fifties and early sixties, but the great decrease in the use of leeches in these days has rendered unnecessary the enormous increase in leeches, of which this excessive feeding was the *raison d'etre*. A few leeches are collected in the swamps by the peasants, but these leeches mostly get their nourishment from the legs of horses which wander by chance into the little pools where the leeches are secreted. A few horses are driven into the swamps for the leeches to feed on now and then, but these are used again and again, and though this is cruel enough, it is not the stupendous cruelty described in my letters. The swamps are only a few inches deep, so it is impossible for the horses to be "sucked down and seen no more."

This withdrawal is satisfactory enough, so far as it goes; but what of the "several sources" who confirmed the original statement? what of the "several confirmatory letters"? We cannot do better than cite Mrs. Hadden again:—

There are quite enough cruelties without inventing them, but unfortunately everybody cannot be made to understand this; amongst others my informants who made categorical statements to me.

Mrs. Hadden, though she was misled, seems to have made some inquiries before publishing her letter; here, however, are specimens of the kind of communication we not infrequently receive, which may be true enough, but for which no sort of confirmation is adduced.

I was told the other day by a friend, that in order to obtain the peculiarly soft appearance of Suède gloves, the skin of which they are made is torn from the animal while alive. Can this be true? If so, surely no one who has any feeling for animals would wear Suède gloves!

Two correspondents send a paragraph from the *Daily Telegraph* of September 12, one of them adding the sensible comment, "This intimation would appear to be of little value, unless the name or some description of the cloth is given." Here is the paragraph:—

"An Englishwoman" writes: May I beg you to intercede on behalf of numberless dumb and helpless creatures, who are daily being tortured beyond description at the behest of fashion? I understand that a certain beautiful cloth is likely to be very extensively worn by ladies during the coming autumn and winter, and I therefore entreat you to let the public know what terrible suffering its manufacture involves. It comes from France, and before a single yard of it can be made hundreds of rabbits must be plucked alive, the fur thus procured being woven into the texture. A particular breed of rabbits only is suitable, the poor animals being carefully tended during the intervals elapsing between the crops. The agony suffered both during and after the plucking operation can hardly be

imagined, and all right-thinking women will, I feel sure, abstain from wearing this fabric, soft and fine though it is. In selecting materials for winter wear, they will do well to satisfy themselves that they are not perpetuating a practice that is abhorrent to all our notions of humanity.

We fail to see any advantage in the publication of this kind of thing, and only reprint it as an example of what should be avoided.

There is danger of exaggeration in other directions. We have received a parcel of the publications issued by Messrs. Bell & Sons for the Humanitarian League. Some of these we have already noticed favourably, and those now before us* are all well printed, admirably illustrated, and eminently readable. Yet here and there we find a strained note—as, for example, in *Animals in the Wrong Places*. We are no advocates for the caging of birds, but it is surely an exaggeration to say that "to a truly merciful man or woman a bird in a cage is a source of lasting sorrow"? Some of the most tender-hearted folk have kept both birds and animals in captivity; and we should never have had the delightful series of books with which Mrs. Brightwen has enriched our Selbornian literature, had she not been able to observe their habits and study their characters. In one of these little books we note that Miss Carrington says that the supply of ostrich plumes "involves undoubted cruelty." Perhaps she has evidence which justifies this statement, but none is produced; and so far it appears to us that those best likely to know from personal experience have decided otherwise. The matter was treated at some length in N. N. for 1890, pp. 39-42.

There is also a curious tendency in these books to treat the question of kindness to animals as if it were a side of ethics which had not been discovered until somewhere about the present century, except, perhaps, by certain enlightened pagans, such as Plutarch. We look in vain for any mention of the Poor Man of Assisi—

> "He that, in his catholic wholeness, used to call the very flowers
> Sisters, brothers; and the beasts, whose pains are scarcely less than ours;"

and yet his influence has not been slight, nor has it passed away. Of this we have had a recent example: a lady who had resisted all attempts to induce her to remove an "osprey" from her hat, reflected that such an ornament would hardly be deemed suitable by the founder of the religious order of which she was a tertiary, and thus the influence of St. Francis brought about a reform which no appeal to humanity would have wrought.

Perhaps, indeed, the absence of reference to anything higher than humanity is one of the most striking features of the series.

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* *Featherland*, by G. Manville Fenn, 1s.; *Friendship of Animals*, by Edith Carrington, 1s.; *From Many Lands*, by the same, 2s.; *Nature's Wonders*, by the same, 1s.; *The Cat*, by the same, 1s.; *Animals in the Wrong Places*, by the same, 1s.; *The Animals on Strike*, 1s.; *Tuppy, the Autobiography of a Donkey*, 1s.

The old-fashioned view that the animals, like ourselves, were creatures of God, and in this sense "sisters, brothers," is never put forward. Mr. Ernest Bell, in his various prefaces, never once mentions the Supreme Being; he talks rather of "the reaction after ages of superstition"—evidently forgetting St. Francis—although he admits that there is "a danger of our running into the opposite extreme." He tells us that "the most common objects by which we are surrounded are filled with mysterious powers and attributes which the human intellect is wholly incapable of grasping or explaining;" and that "a just appreciation and knowledge of the mysterious in nature, which we can neither analyze nor measure, is no less important to the welfare of the individual and the community than a grasp of the purely material." It may be that this teaching is more suited to our complex age than the simple words of the Great Teacher telling of the thought taken for the sparrows, and of the lesson to be drawn from the lilies—it may be, we say, yet we take leave to doubt it. To our minds the simpler lesson is the more effective; and the example of St. Francis seems more likely to influence men than the abstract teaching of Mr. Ernest Bell. Nor, among the various stories brought together, admirable and full of interest as they are, do we find anything more charming than this legend of the saint of Crowland, written more than a thousand years ago:—

> It happened on a time that there came a venerable brother to Guthlac, whose name was Wilfrith, who had of old been united with him in spiritual fellowship. Whilst they discussed in many discourses their spiritual life, there came suddenly two swallows flying in, and behold they raised up their song rejoicing; and after that they sat fearlessly on the shoulders of the holy man Guthlac, and then lifted up their song; and afterwards they sat on his bosom and on his arms and his knees. When Wilfrith had long wondering beheld the birds, he asked him wherefore the wild birds of the wide waste so submissively sat upon him. The holy man Guthlac answered him and said: "Hast thou never learnt, brother Wilfrith, in Holy Writ, that he who hath led his life after God's will, the wild beasts and the wild birds have become the more intimate with him. And the man who would pass his life apart from worldly men, to him the angels approach nearer."
>
> There were settled on the same island two ravens, so greedy that whatsoever they could seize they would carry away; and notwithstanding he bore and endured all their greediness, that he might give men the example of his patience. And not only were the birds subject to him, but also the fishes and wild beasts of the wilderness all obeyed him, and he daily gave them food from his own hand, as suited their kind.

Even among the prominent members of the Humanitarian Society are some who might well be more careful in their statements. Only lately, for example, Colonel Coulson gave to the world the announcement that Miss Marie Corelli and her friends were grouse-shooting in Scotland, appending to the statement certain reflections. But Miss Corelli, in a characteristic letter, entirely denied that there was any truth in the story. Colonel Coulson apologized, of course; but surely it would have been better to have ascertained beforehand whether there were any

sufficient grounds for the assertion. Still more recently, the Rev. J. Stratton has taken the Bishop of Nottingham to task for having defended "moderate" sport; and has advanced the view that there is really more to be said for vivisection, which the Bishop denounces, than for what is called "sport" in any form. There are Selbornians who object *in toto* to the collection of natural history specimens—an objection which, if carried to its logical conclusion, would prevent the study of natural science and shut up our museums. And others go to even greater lengths. It is not so long ago that, in the course of a discussion at an educational club, a plea was put forward for the rights of vegetables. "How do we know," said the fair advocate of these rights, "that plants don't feel? we have never been plants ourselves." And on the same occasion we were told of "educationists" who will not allow children studying botany to dissect flowers, lest they should commit, or at least encourage, vivisection!

This article has already run to too great a length, or we should like to have said something about the appalling extremes into which the dog-worship of the present day is allowed to run. This, to all right-minded persons, is no whit less alarming than the cruelty towards animals which every Selbornian agrees to deprecate. At the time of agrarian disturbances in Ireland it was said with bitterness, but with a certain amount of truth, that the sympathies of English ladies were more easily excited by the cutting-off of a cow's tail than by the unhousing of a country side. It is certain that those whose vagaries regarding their pets were recorded lately in the *Strand Magazine*, spend upon their dogs an amount of money which would place many a poor and deserving family beyond the reach of want.

This view cannot fail to force itself upon thinking people, and it is finding expression—witness the following from a letter lately published in the *Echo:* "In these days, when there are 'homes for lost dogs,' 'starving cats,' and a 'society for the protection of birds,' our fellow-creatures (many of them lost and starving too) might have a little of our consideration, as well as the dogs, cats, and birds."

We are not saying, and we do not think, that those who love animals are wanting in affection for their fellow-creatures—St. Francis is a standing example to the contrary: but we cannot help feeling that there is a certain disproportion in the sympathy bestowed upon the two classes. It is in the interest of Selbornian principles, and from a conviction that these are endangered by exaggeration, that we have written these lines.

THE EDITOR.

THE PLEASURES OF RAMBLES.

(concluded from p. 226.)

AND small but pleasant associations connected with the people's love of music and song used to meet one everywhere. At that house up the clough, or out of doors in the corner of this field, met the people in former days to practise music and singing, many of them walking miles to the place of assembly; or from this cottage, two youths, with an enthusiasm for music, walked all the way to Manchester to hear Malibran sing on that memorable occasion when the marvellous vocalisation of the dying singer became almost miraculous, and, as the general excitement increased, she improvised a final cadence which was the climax of her triumph and her life. Even lectures were often enlivened by song. In my walks over the hills I was often amazed to see, in the most out-of-the-way places, where, for instance, I could see no houses, but only a Methodist chapel standing in a field, such an announcement as that a lecture would be given on Jerusalem, by a Fellow of the Royal Geographical Society, and that the Choral Society of the place, wherever it was—I could only learn that it was called "Top o't Clough" (but they all had Choral Societies)—would enliven the proceedings by singing selections from *Judas Maccabeus!*

My rambles used to extend from the Swale, with its elder and lovely Richmond on the north, to the Wye and Derwent, with their beautiful houses of Haddon Hall and Chatsworth on the south. Within these limits I used to find every type of moorland scenery, many spots of historic or literary interest, hills of all lovely colours, types of Yorkshire life and character of daily increasing interest, and an over-abundance, in general, of north-east breezes and gales. In my earlier life I was wont to think the southerly breezes were the only genial or endurable ones; but at last I got to acknowledge that Kingsley, himself a fellow-Devonian, was not far out when he apostrophized the north-east wind as follows:—

> "Let the luscious south-wind breathe in lovers' sighs,
> While the lazy gallants bask in ladies' eyes;
> What does he but soften heart alike and pen?
> 'Tis the hard grey weather breeds hard Englishmen.
> 'Tis the bleak north-easter, through the snowstorm hurled,
> Drives our English hearts of oak seaward round the world.
> Come, as came our fathers, heralded by thee;
> Conquering from the eastward, lords by land and sea;
> Come, and strong within us, stir the Vikings' blood;
> Bracing brain and sinew; blow thou wind of God!"

It was a bleak and cold region; my Devonian temperamen had to get acclimatised; but I never was in such a region fo work. You had to work, and you could work, to keep in health

thus, at last, I got to believe, with Kingsley, that what these good results were due to might be that "Wind of God" that he sings the praises of.

In the northernmost part of my rambles I used to walk through what Wordsworth, a true Yorkshire poet, referring to such lovely dales as Swaledale, Yoredale, Wharfedale, calls

> "The Yorkshire dales,
> Among the rocks and winding scars,
> Where deep and low the hamlets lie,
> Beneath their little patch of sky,
> And little lot of stars."

A little more south I was in the Brontë district, a region of high and bleak moorlands that will live for ever in the works of the gifted sisters; and farther south still, near the rise of the Don, I was in the district most memorable of all to me—the ancestral home of the Wordsworths. Here were their monuments, and here the name was still quite a common one, existing now in the form of Wadsworth, to which it had been transformed by the Cumbrian dalesmen, who usually spoke of their poet as "Yan Mr. Wadsworth, t' maister of t' stamp-office."

Near here had taken place an awful flood, caused by the bursting of a reservoir among those rainy uplands that are full of reservoirs, and sending all down the valley one night what swept away mills, houses and people; shook but left standing one giant chimney, the mill attached to which was carried clean away; caused awful and widespread desolation; and bequeathed to future ages the memory of a terrible catastrophe, and the recording chimney to show to what an enormous height the waters had risen. Not far off a little grove of Scotch pines, which to my eyes always seemed as curst as Wordsworth's "Hart-leap" trees, preserves the record of a spot where a band of Luddites murdered a brave mill owner as he was riding home in those riotous times that are so well depicted in Charlotte Brontë's *Shirley*.

The whole district was bristling with memories. It had been largely peopled by Norwegians, whose thwaites, garths, dales, fells, and fosses were all around you. On opposite sides of the same river you found Linthwaite and Slaithwaite; and Hardraw-force in Foss-dale show well the English forms of the Norwegian Slettafos in Romsdal. The termination "dale" had to my ears a very sweet sound. You had it sometimes to end a short word like Airedale, and it went just as well to terminate a long name like Langstrothdale. And fells and garths were about everywhere, such as Aysgarth, Crow-garth, Crossfell, and Micklefell. At Bournemouth they speak of taking you for a drive up the Stour valley, but routes among prettier names and far finer scenery are to be found in taking a walk up Wharfedale, or down Coverdale or Swaledale.

The names of people, as of places, varied much here from

what one had been familiar with in the south of England. In place of the southern Churches, Woods and Meads, we had here such common names as Kirk, Shaw, Haigh, Hirst, and Murgatroyd; and the Christian names were quite scriptural in sound, such as Enoch, Ephraim, and Jeremiah. Then in the south a fondness seemed to be shown for names that would appear to suggest a rural or a celestial origin, such as Cedar Avenue, Eden Villa, Nightingale Lane, Paradise Road; but here they had quite a different sound such as Brockholes, Royd Lane, Todmorden, Buckstones, Deerhill, and Wolfstones, which seemed to carry one back to a wilder time or a more northern origin. Yet by and by one got to like these names, and even find in some of them a very noteworthy significance.

Some of the words commonly employed by the natives I had to get used to by degrees. In an early walk when asking a Moorland Yorkshireman the way to a certain place, he told me if I went a little way up I should find a gate on the left hand, by which "over top o' t' reservoirbank," I should get to my destination; so I went on and on, a long way, looking out for a five-barred structure of wood, which was my notion of a gate, but I found there no such thing. Then I began to think that there never could be a gate of this type in all the region, seeing that it consisted of open moorlands, and had no gates, in the southern sense of the word. But I was familiar with Burns's poems, and used to sing a song of his that began thus :—

"I gaed a waefu' gate yestreen, a gate I fear I'll dearly rue."

This *gate* surely meant, I thought, a *path;* so I went back, found my path, and got to my destination quite successfully. And many words like this used often to puzzle me.

The people presented first a repulsive barrier. They were an inquisitive folk, who always cross-questioned any inquirer before they would give a bit of information, the first question often proposed being "Wheer do ye coom from?" but if you could put up with this, you found them a very good-humoured race, full of mother-wit, and always ready to do you a good service in their own way, which might, it is true, at times be thought a bit rough. An example of a good-humoured Yorkshire crowd I made early acquaintance with in my very first journey northwards from London. Till I got to Sheffield I had the carriage almost the whole time to myself. The Sheffield platform was crowded by a mass of cricketers on their way home from a cricket-match, which the Yorkshire team had that day won by a narrow margin. They crowded into the carriage, helter skelter, till they not only filled the seats, but stood so thickly packed that there was hardly space to breathe. Feeling somewhat exasperated at this, as it seemed I had good cause to be angry, I at first threatened to complain to the guard. But they bore it all in the best of humours, and by and by, to my amazement, they asked me to appeal to the guard to stop

the train at Lockwood, a stoppage which in those days could be done by a *through* passenger, such as I was alone. The cricket-match had been won, I learnt, by the prowess mainly of one player; and by and by a big cricketer who was standing above me bent down, and pointing to a youth seated near me, whispered, behind his hand, "That's Lockwood!" Being somewhat confused between the cricketer and the place at which I was to stop the train, I sought an explanation, and learnt that the winning of the cricket-match had been largely due to Ephraim Lockwood, whose acquaintance I then made for the first time, and whose cricketing powers I afterwards witnessed on many a field. So the train was, at my request, stopped at Lockwood, where the carriage was eased of many cricketers, and we had room again. The behaviour of the people in this crush, as in many another crowd that I got among in the district, presented a marked superiority over what I afterwards found in the London crowds that came to witness the illumination of the river at Richmond-on-Thames.

Of their habit of cross-questioning you before they would give you a bit of information, the following early instance remains in my memory. In going for my first long walk south, I went for some refreshment into an inn on the very top of the backbone, whence the streams flowed on one side into the Don, and on the other side into the Mersey, and went therefrom into two different seas. As I sat in a very fine kitchen to eat my oatcake—an excellent light walking diet that does not oppress you a bit—I read, very well set out, these verses :—

> "Customers came and I did trust 'em ; I lost my money and their custom,
> To lose them both it grieved me sore, so I resolved to trust no more."

These lines I had seen elsewhere in the South, but the following ones were new to me, and must, I thought, have been added by the local poet :—

> "Trust is unuseful, say what you will ; trust never paid a maltster's bill ;
> I strive to keep a decent tap, for ready money and no strap."

Desirous to know more about these lines, I interviewed the landlord, who, after cross-questioning me in the usual way, about what took me up there, where I had come from, who I was, and where I was going to, became at last quite pleasant in his information. The inn was, he told me, so large because, standing as it did, on the borders of three shires, a great market used to be held there before railways were invented—much, I supposed, as sheep and cattle fairs used to be held on some hills in Wessex—and that this was the only house at all near there. On learning that I was intending to walk to Chatsworth and Rowsley, he said that, as it was a wet Spring, I should find the path, in some places, what he called "a bit soft." My ordnance map seemed to show that my moorland path took me over Featherbed Moss; so I was glad when he

told me that he would go a bit with me to show the best way. This he did most considerately, showing me how to learn from a distance the soft places, of which there were several very bad ones, giving me much valuable knowledge about the moorlands and mosses, and sending me on my way, in the next county, rejoicing and successful.

The knowledge that I then acquired stood me in good stead in many a moorland walk. Not long after, when I was walking from Hawes to the top of Ingleborough, on going up the steep north-western shoulder of the mountain I found a party on the summit who had lunched there and had just set off to walk to the station at Clapham. Taking the very route that my Yorkshire friend would have warned me to avoid, I could see, as I sat down on the top, that they got, by and by, into his "soft places," from which they had scarcely extricated themselves when I walked past them, on my way towards Faraday's birthplace, on soft, dry turf, quite comfortably. The persistent inquisitiveness of the people it took me long to get used to. Once I was rather perplexed by a couple of tall Yorkshiremen, who came from a group of workmen that were engaged in making a big reservoir among the rainy and elevated moorlands, to tell me that they had a bet about me, and to ask if I would tell them who I was and what I did up there. I had walked about on these lofty moors pretty much, and one party had, I was told, maintained that I was the Milnsbridge parson, while the other party betted that I was "not a bit of a parson," so one from each side had come for me to settle the bet. Though this seemed to me rather an odd proceeding, I settled the bet; and on asking the losers why they took me for the parson, and the winners why they thought me "nowt of a parson," as they phrased it, the explanations of both were very racy indeed.

A Yorkshire lady, who had done much hard walking over Alpine passes, was desirous to see some of this upland scenery in her native district; and, as she wore strong boots, as all good walkers do, I undertook to be her guide to what I deemed the fine moorlands where these workmen were making the big reservoir. So we went there, walked all along the very rough embankment, went therefrom to the top of a high hill above, from which there was a glorious view, and thence along the edge of a moorland escarpment that might have been, in earlier geologic ages, the shore of some primeval bay, over rough ground, and quite in sight of the workmen all the time. And when, a week later, I walked past them, as they were seated at their dinner, they accosted me, in a very free and good-humoured style, saying, "That were a gran' lass that came up with you the other day, and, my word, she *can* walk," to which another man added, in quite a Yorkshire style, "Eh, she can *that*;" which was their invariable form of emphasizing an assertion.

By degrees as I became used to their brusqueness, I got to recognize in the people a genuine courtesy of the truest kind

that never failed and was always to be relied upon. They made no pretence, and showed their worst at first; but by walking about much among them, and seeing them at home, one soon got behind their barrier of distrust, recognized their sterling qualities, and became an admirer of the land and the people.

Above all people that could anywhere be met with they seemed to me to show best the characters thus set forth by the poet:—

> "Stern o'er each bosom reason holds her state,
> With daring aims irregularly great;
> Pride in their port, defiance in their eye,
> I see the lords of human kind pass by;
> Intent on high designs, a thoughtful band,
> By forms unfashioned, fresh from Nature's hand;
> Fierce in their native hardiness of soul:
> True to imagined right, above control;
> While even the peasant boasts those rights to scan,
> And learns to venerate himself a man."

That they gained the repute herein stated from one who was not a bit in harmony with them is, surely, much to their credit. Their critic went among them as to a land of exile; the characteristics of the people and their land were in entire disaccord with what he had been wont to admire, or even to tolerate; the hard stone walls in place of hedges, the absence of fields, the tall chimneys, the factory oil, and the concomitants of a manufacturing district everywhere to be found: these things were all entirely alien to his tastes; and what he had everywhere heard of the people had led him to expect something very different from what he found.

Of the natives of the district that he had most to do with, John Wesley said they were the wildest he had ever known; and Wesley was, one would think, a good judge of wildness in districts or people. Yet they conquered all these repugnances; turned the loathing into a liking, which soon deepened into a genuine affection for the people and their land; and made the critic at last leave their district with a profound regret, carrying away with him as the most delightful of all his recollections of rambles, those which he had enjoyed over the moorlands that lie along the backbone of England.

W. J. C. Miller.

Richmond-on-Thames.

FROM YEAR TO YEAR.

EACH year differs from those gone before in its varying interests of bird life. In some we see more of blackbirds, in others thrushes are supreme; yet another season and chaffinches are of absorbing interest, whilst in another the cruel ravages of the sparrow-hawk stops for a time the joyous outburst of mirth. Last year, to our great delight, a pair of redstarts built in our ivied wall near one of the windows for the first time. Every opportunity of quiet and encouragement was afforded them; they successfully brought out into the world a large and healthy family, and we hoped that a remembrance of past mercies would induce them to return a second spring, but never a redstart has been seen near the house this year! Of blackbirds we have not seen as many as usual. An old blackbird who had lost a claw in a trap, and had been fed regularly from the house for fifteen months, was last spring driven away by younger birds, and with him went much of our interest in the individual blackbird; the difficulty of feeding them, in spite of the ubiquitous sparrow, is also an ever-increasing one. The rigours, however, of a possible severe frost in the near future may effect a change in the relations of birds to us.

Of wagtails, pied and grey, we have seen more than usual this summer. A pair of grey wagtails, with their yellow breasts and long elegant tails, built at the back of the house near to a running spring, and the pretty birds were constantly about the windows, hovering frequently in search of insect food, but never condescending to partake of the daily rations of hempseed and soaked crumbs, so much appreciated by many of the birds. Towards the close of a hot day in July I went down our private road, which is fenced in on either side by iron railings, and there I saw, perched on these railings, a family of pied wagtails—five young ones and the parent birds. There they were, wagging their pretty tails and showing their snow-white feathers. I stood for some time watching them; first one and then another would flit gracefully into the air to secure a passing fly, and then back to its perch again. Then there would be a darting backwards and forwards, and exchanging of sides, like figures in a bird quadrille; then as I came close upon them, the whole party took flight to the nearest tree, their white feathers flashing in the afternoon sunshine like shining silver.

Another July day a large family of blue-tits was brought to our drawing-room window; there was a sound so extraordinary of fairy-like squeaking and screaming and buzzing, that I went to see what was happening, and chanced on this charming sight. Of course I put out some hempseed on the window-sill, and presently saw one of the parent birds involved in an entanglement of young blue-tits, all striving to partake of one minute grain of shelled hempseed. The parent bird successfully extri-

cated itself from its embarrassments and returned for more hempseed with a similar result.

Every spring we have increasing numbers of greenfinches, and every spring they are a season tamer, coming about the windows with the confidence of the chaffinches; their bright green plumage contrasting charmingly with the varied markings of the chaffinches, titmice and nuthatches, who are also regular visitors. The greenfinches appear in February, or the first week in March, according to the state of the weather, and after the young ones have been introduced to us, and taught the art of shelling hempseed, they all gradually disappear, and we see no more of them till the following year, although they are supposed to winter here.

Another mystery that we cannot solve is the non-appearance of second broods amongst the chaffinches. According to all authorities the chaffinch is a double-brooded bird, and, because of their delightful tameness, we see more of them than of any other birds, redbreasts excepted. Of the second broods of blackbirds, thrushes and redbreasts we have evidence enough, and as for sparrows ——! But the chaffinches seem to content themselves with one effort, and the young ones are brought to us with evident parental pride, to be admired and fed. In fact the yearly advent of the young chaffinches is an event looked forward to, and delighted in, by us all. It was in the last week of this year's beautiful May that, as we drove along a lane on the edge of the moor, we noticed on a tall bush in the hedgerow a young yellow-hammer, perched on one of the topmost branches, taking its first look out into the great world. It was an afternoon of gorgeous beauty, and the sunshine glowed on its yellow plumage. It was a spring picture not to be forgotten, standing out as it did against the deep blue of the sky in the east.

On another afternoon in the same week we were walking on the moor, and noticed what at first we thought was a small round stone under a great granite boulder; but a closer inspection showed us that it was a young stonechat, evidently put there by the old birds, gazing round it with the innocent fearless expression of young birds in lonely places. The parent birds, meantime, with more knowledge of the world and its wicked ways, came screaming round us in great distress. We assured them we meant no harm, and calling off the dog, left the young bird under the great boulder to continue its investigation of the new world on that glorious spring day.

One day early in the spring a sparrow-hawk stunned itself by flying against one of the upstairs windows. We thought and hoped it was dead, and called to the man who was gardening to come and remove it. Just as he approached it, it made a supreme effort, and took flight to the nearest tree. After this we thought we were freer from its visits for a time, but later in the season its attacks became as violent as ever. One day in July we noticed a young thrush flopping helplessly about, and

a friend who had seen a nest near it, put it back, as it seemed too inexperienced to be left alone. But later in the same day we found it, having again ventured out, headless. The following week the same friend was sitting quietly under a hedge on one of the very hot days in the beginning of August, when a sparrow-hawk flew over, and was so startled at the unexpected sight of a human being that it dropped its prey at our friend's feet, and it was a young partridge, without a head. So we felt assured that the same fate had been that of the young thrush. It has always been our rule to allow no birds to be shot or trapped on our premises (not even sparrows); but a long succession of outrages on the young and helpless make one almost out of patience with the sparrow-hawks. I mentioned our difficulties, as to whether the death-warrant of the sparrow-hawk should go forth, or whether the balance of power should be left to Nature herself, to a literary friend, whose researches in the literature of bygone centuries seem only to intensify his interest in the world of Nature around him, and he thus expressed his views in a letter:—"It is an ethical question, which I must confess myself unable to solve. If it is right to protect the chaffinch from the hawk, is it not, nevertheless, wrong to deprive the hawk of his dinner? Just fancy, now, if a 'superior person' were to intervene perpetually, or even occasionally, between that objectionable but necessary (as we esteem him) individual, the butcher, and carry off the victim which is destined for our dinner. The only way I can see out of the difficulty is, that as you feed the small birds with crumbs to save them from the misdeed of eating your fruit, &c., so you might provide the hawk with steaks and chops to save the small birds! but then—how about the sheep and oxen? I give it up as insoluble!"

So do I—so do we all! Just at this moment a farmer's daughter calls, to say it will considerably lighten her basket if we will take a couple of chickens off her hands, she is carrying to the village. This is how we do our shopping here—but what a commentary on the above!

Now in these days of autumn is the time when the song of the young redbreasts sounds out with such wondrous sweetness. Of the old birds we have not seen much lately, but now, moulting and a little change of scene accomplished, back they are come to their old haunts, and fights for possession set in; but we hope, that with a liberal allowance of crumbs some of the young ones may be permitted to remain with us—so bright are their scarlet waistcoats! so clear their fresh young song! There is something inexplicably charming about the autumn song of the robins; there is none of the love-making and rivalry of spring to inspire it; when we go out they seem to sing to us as though the song meant something for our dull human ears, and we try to catch its hidden meaning. Wordsworth thus wrote of the autumn song of birds, meaning, evidently, the redbreast:—

"This, this is holy :—while I hear
These vespers of another year,
This hymn of thanks and praise,
My spirit seems to mount above
The anxieties of human love,
And earth's precarious days.

"But list !—tho' winter's storms be nigh
Unchecked is that soft harmony ;
There lives who can provide
For all His creatures ; and in Him,
Even like the radiant Seraphim,
These choristers confide."

Of all the poets, Wordsworth seems most to have appreciated the redbreast's touching song ; those lines of his "To a Redbreast" (in sickness), are not as well known as they deserve to be ; the two last verses run as follows :—

"Methinks that in my dying hour
Thy song would still be dear,
And with a more than earthly power
My passing spirit cheer.

"Then, little bird, this boon confer,
Come, and my requiem sing,
Nor fail to be the harbinger
Of everlasting Spring."

Amidst the days of storm in this wild October, there have been transient hours of welcome sunshine, when we could note the bird-life around us ; but it was on one of the few fine afternoons that September brought us, when, as the witching hour of sunset approached, a sound as of a vast company of sparrows, chirping in something like unison, fell on our long-suffering ears. A chirping from one alone there was heard, which methinks proceeded from 'Arriet, as we call the ancestress of the tribe ('Arry being a fit name for her spouse), and thus she addressed the crowd of her descendants—for time was when our garden was an abode of peace, with only this one pair of sparrows to break the calm of the sanctuary :—

"And now, my dear children, this has been an exhausting year for me ; never did hen-sparrow bring up so many broods as I this hot season, and now I must have a change of air. I have taught you the art of snatching as no one else could ; if food is scarce, follow close on those pampered chaffinches and redbreasts, and snatch the crumbs from under their beaks—and once more we will sing the song I taught you as nestlings." And from a multitude of brown throats went up a miserable substitute for song in harsh chirps, and I, too well accustomed to the sparrow language understood it thus :—

Snatch and steal, grab and steal,
Jabber and chirp, and chatter and squeal ;
Everything take and nothing give,
This is the way we sparrows live.

Then 'Arriet flicked her tail and flew up to her favourite warm corner in the ivy against the kitchen wall. But on reaching it,

some of her latest progeny were found to be snugly ensconced there. Then ensued a scene of sad disorder; 'Arriet pecked her forward offspring so severely that little feathers and bits of fluff flew all around, as the little frightened screaming youngsters were hustled out. 'Arriet remained in triumphant possession, and surveyed the garden from her vantage ground. At last she, too, settled to roost, and the sparrows were silenced for another day. Then, clear and sweet, rose the robin's evening hymn from a bush close to us, and then another, and yet another sounded from other bushes. We notice that in fine, settled weather, the robins sing from the tops of trees (we noticed this especially in the splendid weather of last spring), but in wet or stormy weather from amongst the bushes. Presently the chig-chig-chigging of the blackbirds began, followed by the zit-zit-zitting from the redbreasts — necessary preparations for repose, apparently, with both birds — and then, but for the occasional caw of a home-coming rook, and an indignant sudden chatter from an angry magpie, all was silent. As we turned to come into the house the wild hoot of an owl sounded from one of the opposite trees, and it was answered by another, and the night was upon us.

HELEN J. ORMEROD.

NOBLE SPORT.*

Six hundred homes are darkened—not again
Shall feet come pattering through the earthen hall,
Never at dewy morn or even-fall
Will merry hearts go forth to vale and plain;
Love has been banished—moonlight now in vain
Invites to tender wooing; sunbeams call
No more the children forth to festival,
Where once was life and joy, is death and pain.

The woods are mournful, meadows lose their charm,
The warren reeks of murder—copse and glen
Echo the sorrows of a barbarous day—
Six hundred creatures who had thought no harm,
Six hundred! butchered for one fierce hour's play!
Shame on your sport! ungentle gentlemen!

H. D. RAWNSLEY.

* In the *Manchester Guardian* of October 23 appeared a paragraph headed, "A Rabbit Shooting Record," which stated that a nobleman and his guest had had some extraordinary shooting in the rabbit warrens of the estate. Accompanied by three loaders each, they had succeeded in killing 3,000 head. The distinguished guest, we are told, "accomplished the feat of killing more than 600 rabbits in rather less than an hour."

ANIMAL STORY BOOKS.*

THE fascination attaching to stories about animals has held sway from very early times, and has in no way lessened in these latter days. Last Christmas we were rejoicing in the new *Jungle-book*; and Mr. Lang now takes the animals in hand. He carries us back to Pliny and Plutarch, to Androcles (who is evidently a great favourite with the publisher, as the same picture of him is printed twice), and "the days of Tiberius the Emperor," and then, by way of the Dog of Montargis—Dickens lovers will remember the inimitable account of his drama as performed by one of the "dogs of shy neighbourhoods"—and Cowper's hares and Jesse's dogs—whose legends, we fear, are a little of the nature of the Balliol dog story lately published by the *Spectator*—down to "the dog Oscar" and "Fire-eating Djijam," who may be styled, like the portraits in the *Strand Magazine*, "present day." The world, indeed, is in some sense the poorer for the loss of these two, for they were clever and interesting. But as Oscar killed pigeons—and buried them—although this was the result of previous (and quite harmless) attacks upon seagulls, and Djijam had too great a fondness for taking lighted logs off the fire and carrying red-hot cinders into his box-bed, it is perhaps as well that their careers were not unduly prolonged. Then there are wonderful cats, one of whom is—or was—"on friendly terms with young rabbits," and "wiles away a spare hour by having a game with a mouse"; and tales about all sorts of creatures—birds, beasts, and fishes, to say nothing of frogs and other "small deer"—tales so varied, so entertaining, and—we must add—so marvellous that they form no inapt continuation of the series of fairy books with which Mr. Lang has enlivened previous Christmases. The marvellous, indeed, occupies no small share of the volume; and as Mr. Lang himself, although guaranteeing that "the stories are all true, *more or less*"—an ominous qualification—admits that "it is possible that M. Dumas and M. Théophile Gautier rather improved upon their tales," and owns that he has his doubts "about the bears and serpents in the tales by the Baron Wogan," we may be excused if we claim that freedom of judgment which the average Englishman is prone to exercise liberally on most matters.

The older stories from Pliny are rendered into quaint English by Mrs. Lang, but we suspect the editor has given them the benefit of his supervision. Here is one:—

"In the days of Tiberius the Emperor, there was a young raven hatched in a nest upon the church of Castor and Pollux, which to make trial how he could fly, took his first flight into a shoemaker's shop, just out against the said church. The master of the shop was well enough content to receive this bird as commended to him from so sacred a place, and in that regard set great store by it. This raven in short time being acquainted with man's speech, began to speak, and every morning would fly up to the top of the Rostra, or public pulpit for orations, when, turning to the open Forum, or market place, he would salute and bid good-morrow to Tiberius Cæsar, and after him to Germanicus and Drusus, the young princes, every one by their names, and anon the people of Rome also that passed by; and when he had so done, afterwards would fly again to the shoe-maker's shop aforesaid. This duty practised, yea, and continued for many years together, to the great wonder and admiration of all men.

"Now it fell out so that another shoemaker, who had taken the next shop unto him, either upon a malicious envy, or some sudden spleen of passion and anger, killed the raven. Whereat the people took such indignation that they, rising in an uproar, first drove him out of that street, and made that quarter of the city too hot for him; and not long after murdered him for it. But contrariwise, the carcase of this raven was solemnly interred, and the funeral performed with all the ceremonial obsequies that could be devised. For the corpse of this bird was bestowed in a coffin, couch, or bed, and the same bedecked with chaplets of fresh flowers of

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* *The Animal Story Book.* Edited by Andrew Lang. With numerous illustrations by H. J. Ford. Longmans, 6s.

Cat and Bird Stories from the "Spectator." With an introduction by J. St. Loe Strachey. Fisher Unwin, 5s.

all sorts, carried upon the shoulders of two blackamoors, with minstrels before, sound of the haut-boys and plays on the fife as far as the funeral fire, which was piled and made in the right hand of the cause of Appia, in a certain plain or open field.

"So highly reputed the people of Rome that ready wit and apt disposition in a bird, as they thought it a sufficient cause to ordain a sumptuous burial therefore."

The numerous and excellent illustrations by Mr. H. J. Ford add greatly to the attractiveness of the book, which forms an excellent Christmas-box. "There ought to be a moral," says Mr. Lang; "if so, it probably is that we should be kind to all sorts of animals." With this sentiment all Selbornians will agree, though we fear some will be startled when they hear the editor's addition—"and, above all, knock trout on the head when they are caught, and don't let the poor things jump about till they die."

If a word of criticism be needed, it may take the form of an inquiry why so good a bibliographer as Mr. Lang is not more exact in his references. Some date might surely have been assigned to such authorities as *Loudon's Magazine of Natural History* and *The Naturalist's Note-book*.

It is not to be wondered at that the success of the *Spectator's* "Dog Stories" should have led to the communication to the same paper of a variety of tales dealing not only with cats and birds, but "horses, donkeys, cows, apes, bears and other animals, as well as of insects and reptiles." And it was equally natural that such stories, and others which had appeared in earlier issues, should, like their predecessors, be gathered into a volume which is a suitable companion to its forerunner. All of them are "true, more or less," to quote Mr. Lang, and we imagine that the "more" hold a far larger proportion in this volume than in the narratives of the *Animal Story Book*. On this account it will probably appeal more forcibly to the grown-up Selbornian, while Mr. Lang's book will hold its own among the younger folk. Mr. St. Loe Strachey writes a delightful introduction (mainly devoted to that much underrated animal, the cat), which is the funniest part of the book, and, like Sam Weller's love-letter, makes us "wish there was more of it." Here is an "instance of the freezing and offensive dignity which cats are capable of exhibiting."

"I remember to have seen a distinguished diplomatist, trained to hold his own in the courts of kings, and never at a loss to get out of an embarrassing position, or to meet an act of rudeness by a rapid thrust of wit, utterly put down by a small black kitten. The diplomatist had been playing with the kitten, but he went too far; instead of making fun for the kitten, he made fun of her, and this she was quick to see and to resent. Determined to mark her sense of his conduct, she at once put a stop to the game, and calmly but resolutely placed her small person in front of the man of ceremony, wrapped her tail neatly round her toes, and gazed at him with an air of pitying contempt. It was an electric moment, and the rest of the company watched with palpitating eagerness the struggle for ascendancy. It proved, however, an unequal contest. After a few moments of a regard which told more of sorrow than of anger, the kitten deliberately began to wash her little black face, stopping every now and then, paw in air, to give a look of faint surprise, mingled with disgust, at her antagonist. The situation speedily became ridiculous, but not for the kitten, and in a very short time the diplomatist had evidently admitted himself beaten; the kitten then rose, walked to the window, and placidly gazed out at the landscape, every curve in her back showing her sense of the bad taste which had characterised the incident that had just terminated."

We think the editor might have exercised his powers somewhat more rigidly; there seems no advantage, for example, in reprinting a letter containing a misprint, and then proceeding to give its correction in a second communication. Nearly all the letters on the cuckoo might have been omitted without loss, and the same might be said of those on the canary, only one of which can be called a "story." The letter on rooks contains interesting observations, and a funny little story: "I was calling one afternoon on a friend, when a lady I did not know came in, and as she also had a rookery, my friend told her of mine, and said how fond I was of the rooks. 'Ah,' said the lady, 'so am I; I often say that through the season we almost live on rook pie!' and when I suggested that I should not like to see my rooks in a pie, her really delightful answer was: 'No; some people prefer them stewed!'"

SHORT NOTICES OF BOOKS.

We have received a further instalment of the North American Fauna, published by the U. S. Department of Agriculture, dealing with the voles and lemmings, which will be welcomed by all who are interested in these, occasionally destructive, little animals. It is fully and admirably illustrated with figures of skulls, jaws and teeth—the parts mainly relied upon in the classification of these rodents—and contains some interesting remarks on geographical distribution and habits.

Elementary Geology, by G. S. Boulger; pp. 180, 8vo, London (Collins' Elementary Science Series).—No beginner in the study of geology was ever at a loss for a text-book; there have always been plenty. The attractive little volume that now lies before us is, we are told, *The First Book of Geology*, by the late Dr. W. S. Davis, re-written and revised throughout, and on the whole it compares favourably with its predecessor; but we hope when the next edition is in course of preparation, that Professor Boulger will go over the names of the fossils and bring them up to date, whilst he should assuredly select a more recent "classification of animals," the one adopted being even more out of date than that which it replaces. The text is clearly written and concise; some of the illustrations are very good, and the whole work is nicely got up. We recommend it to geological Selbornians.

B. V.

SELBORNIANA.

The Royal Buckhounds.—A letter, signed by the Archbishop-Designate of Canterbury and other prelates and leading men, has been sent to Lord Salisbury, expressing deep regret that another season's sport has been inaugurated in connection with the Royal Buckhounds. The signatories again appeal to her Majesty's ministers to abolish the establishment or convert it into a national drag-hunt, declaring that the present pastime is the reverse of creditable, and calculated to check the growth of humane feeling in all who witness it.

Sport or Slaughter?—"A party entertained by the Marquis of Ripon upon his Studley Royal Estate shot 6,748 head of game in four days. Of these 6,117 were pheasants. The heaviest days, viz., 2,245 head and 2,642 head, respectively. The party comprised six guns on the first two days, and seven guns on the two last days, upon which the Marquis of Ripon went out, having been indisposed on the two first days. The party included Lord Elcho, Lord de Grey, Sir H. Gore Booth, Major St. Paul, Mr. F. St. Quintin, and Mr. G. St. Quintin." Taking 1,687 as the average per day of the four days' "sport," we find that each of the six men shot 281 birds per day—making about 70 per hour, reckoning the day at four hours. Or put in another way:—The greatest mortality occurred on two days, viz., 2,245 and 2,642 respectively. This latter number, divided among six men, gives 440 per man; say four hours as a day—110 per hour; nearly two per minute! Sharp work. Do they all take turn nicely? If not, some guns must despatch more than two per minute—and this is sport! When we object to sport we are told that it is so healthful and invigorating to mind and body; country can be admired and observed—in fact, the sportsman is simply an artist in disguise. That this is an utterly fallacious argument as regards hunting everyone can see; for who can look about him and admire Nature when he is riding over rough ground and endeavouring to follow a lead? But shooting is different, we are told. See all the beautiful picture-books of the man and his dog tramping over a field or through a copse, the pointer hunting up the game, the man watching. How true is this? or, rather, how untrue! The pheasants are as tame as fowls; beaters drive them along, the birds not being the least frightened—and then the slaughter! The only thing to be said for it is that possibly these

men killed the birds outright, whereas the sportsmen who make fewer bags probably wound and main dozens of poor birds who get back to the bushes to die in agony.—*Echo.*

Encouragement!—Until I read your paper on "Ospreys" in the August number, I had no idea of the cruelty connected with them. I thought you might like to know I have taken two out of my honnet and burnt them, and will never wear ospreys again.

L. A. L.

A Sportsman's View.—The following extract from a letter by an ardent sportsman may interest your readers :—

"I quite agree with you about the pleasure of seeing as much wild life as possible, and kestrels, I invariably impress upon everyone, do no harm at all to game . . . there are a few about now, and I saw one of the finest natural stoops I ever saw a short time ago . . . by a kestrel, and he caught his prey. Another bird that I am very fond of seeing is a buzzard, and those on 'passage' will be coming in about now; their food is almost entirely moles whilst they are in this part of the country, and they do absolutely no harm to game, but being a very large hawk, every gamekeeper thinks he is a great man if he can kill one. The little marten I am very fond of seeing, and should never think of killing one; though they may kill a few young grouse, their numbers are so scarce that the harm they do is infinitesimal. I am afraid magpies are very destructive. I am very much against keepers having a gun; if they have one they cannot resist making use of it."

E. G. W.

The first meeting of the Committee for the Protection of British Lepidoptera in danger of extermination, appointed by the Entomological Society of London, was held on October 14, Professor Meldola in the chair. Letters from the City of London Entomological and Natural History Society, the North London Natural History Society, and the Leicester Literary and Philosophical Society, expressing warm sympathy with the object of the Committee, were read. After discussion of the best methods of securing the objects of the Committee, it was resolved to invite information as to species in special danger of extermination, with a view to future action. The Hon. Sec. is Mr. Chas. W. Barrett, of 39, Linden Grove, Nunhead, S.E.

NATURAL HISTORY NOTES AND QUERIES.

Ants (p. 237).—Probably the ants were swarming. Like wasps and bees, ants live in communities consisting of males, females and imperfect females or workers. Both males and females are winged. The males are only to be found in the nest for a certain time, and after depositing the last batch of eggs in the autumn the females also disappear, leaving eggs, larvæ and pupæ to the care of the workers, who feed the larvæ and carry them, as well as the eggs, from one part of the nest to another. Later on the larvæ become pupæ, many of them first enclosing themselves in a silken cocoon (these cocoons are often called "ants' eggs," and sold as food for soft-billed birds). The pupæ develop, some into wingless workers, others into perfect males or females with gauzy wings. These remain in the nest until a favourable opportunity occurs for swarming. Individuals from all the ants' nests in the neighbourhood generally take flight on the same day in such numbers that they often produce the effect of dark clouds. But after the nuptial flight the males soon die, and the females drop to the ground, where they are seized by the workers, who tear off their wings and conduct them to the interior of the nest, where they spend the rest of their lives in laying eggs. Several queen-mothers may live amicably together in the same nest.

L. E. Roberts.

Ants.—On Thursday, July 30, I was watering plants in my little greenhouse, and heard a curious patter on the glass like falling drops of rain. Looking out I saw it was quite fine, and wondered what it could be. Soon after one of my daughters told me that such numbers of flying ants were coming into the house, falling down the chimneys and swarming over the fenders. No room seemed free of them. This accounted for the mysterious noise. Nothing could be done, except to hope that they would depart, flying off in a cloud as they had come. Shortly after a lady and her little girl came in at the gate to bring me a bunch of Iceland poppies. They remained transfixed, and I fancied the child was looking at my tortoise, "Shelley," when the lady, seeing me pass the window, called out, "Oh, what a menagerie you have here; do come out and see." When I went to the gate I found the asphalte walk a hurrying scene of wild confusion. The little ants, who have their peaceful dwellings at the border of the garden walk and grass plot, were tearing wildly about, and the whole place was overrun with the large-winged ants, who were evidently a most disturbing element, though whether it was a pleasing or alarming excitement it was impossible to tell. A few hours afterwards all was again quiet, and there was no means of knowing whether they had flown away, or whether they had done as we heard in our childhood, "bitten off their wings and settled down when they found a new dwelling place to their mind."

West Kirby. M. SYBILLA DALGLISH.

Australian Robin.—In N. N. for 1893, p. 193, you inserted a paragraph relative to the attacks of the pretty little Australian robin upon a window-pane. This spring a fine specimen of the "Whistling Dick" or shrike thrush (*Collyriocincla rectirostris*), is performing the same manœuvre, and being a large vigorous bird with a very strong beak, his tap-tap-tapping can be plainly heard in the road some distance away. When driven off, he will utter a loud triumphant whistling note and fly to one of the large eucalyptus stumps hard by, where he will sit and watch for awhile, returning again to the attack when the coast is clear.

Table Cape, Tasmania. H. STUART DOVE.

Swallows in November.—On November 2, while passing over the river Test, at Mottisfont in Hampshire, I observed numbers of swallows flying over its surface, and anon rising to the height of forty or fifty feet in the air above the water. None were seen anywhere else except just over the water in that spot. Is it surprising that the old naturalists should have believed them about to hibernate beneath the surface of the water, on seeing them at a late season darting over its surface and nowhere else? Watching carefully, I could clearly make out, by their dark-coloured throats and very agile flight, that they were genuine swallows and not house-martins. I may add that on October 27 I saw house-martins flying to and fro over Kew Gardens, and the same birds flying at a considerable height over the New Forest on November 1. I should be glad to know if any explanation of the phenomena above mentioned is forthcoming, and if any similar observations have been made this year.

W. C. WORSDELL.

Sparrows.—I should be glad if any of your readers can account for this extraordinary behaviour of sparrows in Anglesey. I was sitting last week with a friend in a room with two large windows. It was between eleven and twelve o'clock at night, when suddenly we became aware of what we at first thought were large hailstones being dashed against both windows. On drawing up the blind we discovered about eight or ten sparrows apparently trying to get into the room. They would fly straight at the glass, and then if not stunned, would flutter up the panes like moths, in their endeavours to gain an entrance. Those that were injured from the first concussion, after resting a little on the sill or the ground beneath, would again renew their efforts. Some were dashing against the other window simultaneously. We watched them for some little time (about five minutes), after which, either from exhaustion or some other cause, they disappeared. Later on, the same thing occurred in my bedroom, both before and after the light was out. We expected to find several dead birds in the morning, from the violence with which they flew against the glass, but none were visible.

No one has hitherto been able to give me a satisfactory explanation of this strange occurrence.

J. R. S. F.

Frog, Toad and Snake (pp. 218, 238).—At the latter reference Mr. Kelsall writes: "I have only once seen a snake eating a toad, and imagine that it was by mistake; indeed I think it was trying to spit it out." I believe, on the contrary, that the snake feeds upon both frogs and toads quite impartially. I formerly "went in" for keeping British reptiles, and have caught many snakes, which always, if they had been lately feeding, threw up their prey, sometimes in a semi-digested condition, in their terror at being themselves captured; and in my experience this prey was a toad quite as often as a frog.

Walpole Vicarage, Halesworth. W. R. TATE.

Spring and Harvest meeting.—In this parish in the present year (1896), I last heard the cuckoo—its full note—on July 9, and the first field of oats in the parish was cut the next day, July 10, the earliest date I have ever known. It is certainly unusual that spring and harvest-tide should thus meet. Here in East Suffolk the cuckoo calls well into July about one year in three. Has any correspondent noticed this in other districts? Until I came into Suffolk, I remember that the cuckoo (in Surrey, Dorset, and Kent) always altered its cry of "cuckoo! cuckoo!" incessantly repeated, into "cuck-cuck-cuck!" as soon as June set in, and was quite silent some ten days before July. In Suffolk, I one year heard it still repeating its full call so late as July 13.

Walpole Vicarage, Halesworth. W. R. TATE.

A Spider's Web (p. 237).—Probably the fact that spiders eat their webs (on a principle of economy) is very generally known. I proved it many years ago by an experiment I had read of, viz., cutting a web across with a pair of scissors. As soon as the spider had recovered from his scare he commenced rolling up the collapsed halves and eating them one after the other. This year I had an opportunity of watching the same process without any test. A large spider had planned his web, with evident forethought, outside our dining-room window. From the outer edge of the brickwork above, and almost exactly in the centre, he had dropped a stout cord of web, which, about half-way down, was split in two and attached to two evergreens in pots on the window sill. The triangle thus formed laid the foundation (to speak in topsy-turvy fashion) of his web. This foundation, though he was there for two or three weeks, I never saw him destroy, and I did not watch regularly enough to say he devoured the rest of his web every day, but I very frequently saw him rolling it up methodically towards evening. Possibly he was influenced by its condition of necessary stickiness, and whether it had been much torn by captured flies. By eight o'clock in the morning he had finished the framework and rays of a new web, and was plodding away at the filling-in part round and round. I often wished I could have seen him at the earlier and more ingenious work, but it would have involved very early rising, and I never achieved it. Perhaps for my reputation for sanity in the kitchen it was as well I did not; for my request that my spinning friend might not be disturbed for window-cleaning caused evident signs of amusement. The spider K. L. mentions may have been disappointed with the position of his web for fly-catching.

Hampstead. E. K. HITCHCOCK.

My experience of spiders eating their webs is not on so large a scale as that of the friends of your correspondent, K. L., but it may be of interest to record what I once saw of the framing of the web of the garden spider, *Epeira diadema*, apparently the same as the one spoken of by K. L.

When I began to watch, the spokes of the wheel were already up, and there were thin concentric lines at wide intervals. Where these crossed the radii there were small tufts of white flocculent material, and in the centre of the web was a larger tuft of the same; and I saw, as the spider span line after line of the more permanent web, using these first cross-lines merely as guides—that the little tufts at the crossings disappeared one by one as she passed them. At last, on reaching the middle, the spider was busy for a few seconds; and then, where the tuft had

been, I saw merely a small vacant place, and in that hole the spider settled herself. My impression as I watched was that she ate her little tufts and the big tuft too, and that they were merely of temporary use as guiding marks ; just as the first thin concentric lines were merely the first mapping out of the finished web.

Kew. E. HUBBARD.

TO CORRESPONDENTS.

Our readers will notice that the present number is enlarged to twenty-four pages, exclusive of the index. In spite of this enlargement, however, we are still compelled to hold over numerous contributions, while there are several books on our shelves which ought to have been noticed ere this. We must ask our friends, especially those whose contributions have been definitely accepted although they have not yet appeared, to exercise patience. The increasing popularity of NATURE NOTES is very gratifying, but it must be confessed that it is accompanied by certain drawbacks, for which we must ask the indulgence of our friends, while at the same time thanking them for their help.

O. H. C. E.—We have already printed Mr. Joseph Collinson's letter on the seal butchery (see N. N., 1896, p. 170).

W. C., E. A. M., and **B. W. S.**—We have no space for reprints from local papers, save when they are of exceptional interest.

B. H. J.—We do not understand your note. Contributors to N. N. are not paid, so that no "agreement" to that effect can have been entered into ; nor do we find any communication from your pen in our August issue.

W. J. G.—(1) *Graphis elegans.* (2) *Verrucaria nitida.* Lindsay's *Popular History of British Lichens ;* it is out of print, but second-hand copies may be picked up.

R. F.—The description would apply to the caterpillars of several hawk-moths ; but if feeding on privet or lilac, it was probably the privet hawk-moth (*Sphinx ligustri*).

M. C. B.—It is an admirable description, like all Tennyson's references to nature, and depicts the distribution of the pollen of the yew.

I. B. S.—It is certainly not a fact.

Mongooses may be obtained at Whiteley's.

B. Bryant.—We will print your letter, but will you kindly read Rule 3 ?

T. W. P.—We hope to name your plants shortly, but so far we have not been able to identify them satisfactorily. The specimens were very good, but it was not possible to examine them when in a fresh state.

L. A. L.—As to ostrich feathers, see N. N. for 1890, pp. 39-42.

M. S. D.—See Rule 3.

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1. All communications for NATURE NOTES must be authenticated with name and address, not necessarily for publication.

2. The return of an unaccepted contribution can only be guaranteed when it is accompanied by a stamped and addressed envelope. We cannot undertake to name specimens privately, or to return them.

3. All communications for any number must be in the Editor's hands by the 15th of the preceding month.

4. Communications for NATURE NOTES should be addressed to the Editor, JAMES BRITTEN, F.L.S., 126, Kennington Park Road, London, S.E., as should specimens for naming, books for review, &c. The Editor cannot undertake to reply privately to questions.

5. Letters connected with the Selborne Society, as well as all enquiries as to the supply of NATURE NOTES, and subscriptions, should be addressed to the Secretary of the Selborne Society, A. J. WESTERN, Esq., 20, Hanover Square, W.

6. The Editor is not responsible for the contents of the last page of each number : communications respecting this page must be addressed to Mr. WESTERN, as above.

SELBORNE SOCIETY NOTICES.

Lantern Slides of the Village of Selborne. — The Council has acquired possession of a series of slides showing various parts of the Village of Selborne and neighbourhood, which have, with a few exceptions, been prepared from photographs taken on the spot by Mr. E. J. Appleby, of Bath. The slides are now available for lecturers on behalf of the Selborne Society, and application for the loan of them can be made to the Secretary.

Birds' Protection Society Slides.—By an arrangement with the Hon. Secretary of the Society for the Protection of Birds, the slides, which are in the possession of the Society, are available for use by members of the Selborne Society. For particulars and conditions, application should be made to Mr. A. J. Western, at the offices of the Society, 20, Hanover Square, W.

Resignation of the Hon. Sec. of the Field Club.—The Council hears with regret that Miss Edith J. Temple has been obliged to relinquish her duties as Hon. Sec. of the Field Club. A special Field Club Committee Meeting will be held on Thursday, December 3, after the Council Meeting, to receive the resignation.

Council and Committee Meetings.—The next meetings of the Council will be held on Thursdays, December, 3, 1896, and January 7, 1897, at 5.30; of the Magazine and Leaflet Committee on December 17, 1896, and January 21, 1897, at 5.30; and of the Finance Committee on December 3, 1896, after the Council Meeting.

A Plea for the British Butterfly.—The article entitled "A Word or Two with Insect Collectors," by Mr. W. F. Kirby, which appeared in the October number of NATURE NOTES, has been reprinted, after revision by the author, in the form of a leaflet, and is now available for issue. Price 6d. per 100, postage extra.

NEWS FROM THE BRANCHES.

Bath.—A Conversazione took place at the Museum, Royal Literary Institution, on Saturday, November 7. A paper was read by Colonel Bingham Wright, on "Instinct in Animal Life," H. D. Skrine, Esq., the President, being in the Chair.

On November 21, the Rev. W. S. H. Samler again delighted his audience with a lecture founded upon further observations upon "Bird Life around Bath," the lecture being illustrated with limelight views.

Clapton (Lower Lea Valley).—On Monday, November 23, at the invitation of Mr. Frederick J. Hanbury, F.L.S., F.E.S., members and friends spent a very enjoyable and instructive evening in visiting his museum at Clapton Common, where the rich collections of plants and lepidoptera were thrown open for their inspection.

Croydon and Norwood.—The first winter meeting of the session was held at Seneca Hall, Thornton Heath, on November 5, when a lantern lecture was given by the Honorary Secretary, on "Bees, Butterflies and Birds," to the children attending the local Sunday School and Band of Hope. For the best essay dealing with the subjects of the lecture, a prize has been awarded to Miss F. Robinson. A series of interesting slides were lent by the Humanitarian League, the lantern being efficiently worked by Mr. Chamberlain.

On November 21, the Hon. Sec. lectured at the Thornton Heath Polytechnic on "Gilbert White and the Village of Selborne."

Ealing.—A very interesting lecture was given on November 16, at St. John's Schools, Glenthorne Road, Hammersmith, by the Rev. Herbert E. U. Bull, who chose for his subject "The New Forest." Long residence in the neighbourhood enabled him to deal with the Forest in an exhaustive and fascinating manner.

EDWARD A. MARTIN, F.G.S.
Hon. Sec. Magazine and Leaflet Committee.

No. 73. Vol. VII.

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Selborne Society,

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EDITED BY

JAMES BRITTEN, F.L.S

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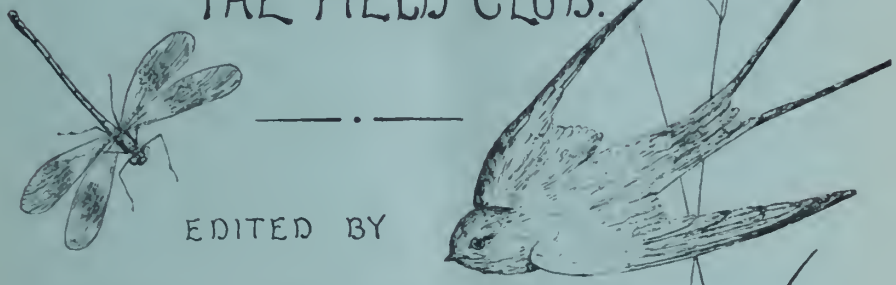

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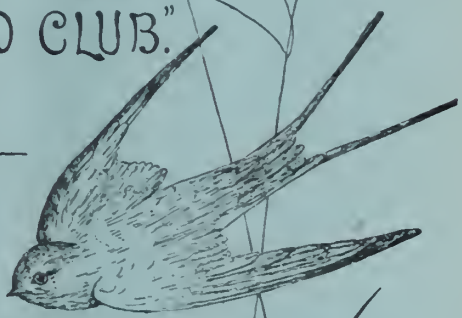

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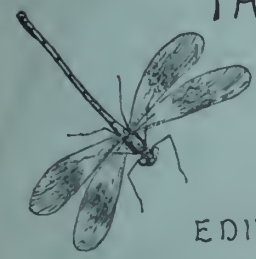

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THE MAGAZINE OF THE

Selborne Society,

WITH WHICH IS INCORPORATED

"THE FIELD CLUB."

EDITED BY

JAMES BRITTEN, F.L.S

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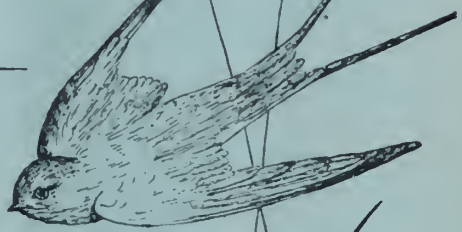

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"THE FIELD CLUB."

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JAMES BRITTEN, F.L.S

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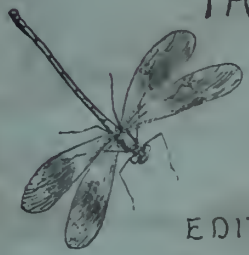

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